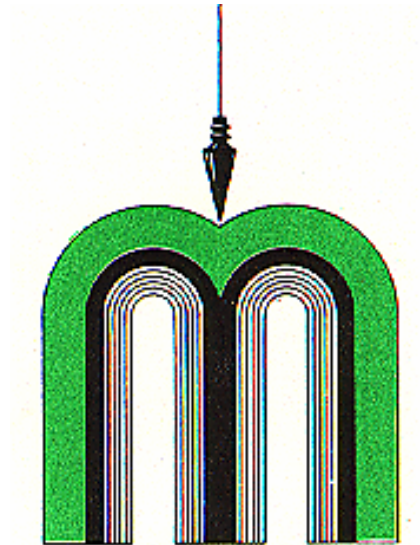


**Mahoning County and Co-Permitted Entities,  
Mill Creek Metroparks and the Townships of  
Austintown, Beaver, Boardman, Canfield,  
Coitsville, Poland and Springfield**

**Storm Water Management Program  
Annual Report  
For  
April 3, 2006-April 3, 2007**



**Authorization for Small Municipal Separate Storm  
Sewer Systems to Discharge Storm Water under the  
National Pollutant Discharge Elimination System**

**Submitted to:  
Ohio Environmental Protection Agency**

## **April 3, 2006-April 3, 2007 Annual Report**

**Mahoning County and Co-Permitted entities, Mill Creek Metroparks and the Townships of Austintown, Beaver, Boardman, Canfield, Coitsville, Poland and Springfield**

**Ohio EPA Facility Permit No. 3GQ00093\*AG for Storm Water Associated with MS4 Baseline Permit**

**Applicant:** Mahoning County and Co-Permittee Storm Water Management Plan

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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MS4 Represented	Name/Title of Signatory	Signature/Date
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This report details the efforts of Mahoning County in cooperation with eight (8) Co-permitted MS4's. In March of 2003 the Mahoning County Commissioners with Mahoning County Engineers (MCE) as their administrative agent with regard to Phase II of the Ohio EPA Storm Water Program, submitted a Storm Water Management Plan addressing the six minimum control measures as outlined in the Ohio EPA NPDES Permit No. OHQ000001 for Storm Water Discharge from small MS4's.

The Mahoning County Storm Water Management Program (MCSWMP) has been drafted as a regional approach to storm water management. The implementation of the (MCSWMP) is based on interagency cooperation to provide County compliance and leadership assistance to the co-permittees who rely on other government agencies for the majority of the BMP's involved.

In August of 2006, the Mahoning County Engineer's Office, in an effort to improve compliance, regional communication and provide more consistent focus to the implementation of the MCSWMP, hired a full-time staff member to oversee the program. This effort has centralized the initiatives of the program and led to increased regional participation. The participation is largely a function of exercising the interagency Memorandums of Understanding (MOU's) established between the Board of Mahoning County Commissioners and the co-permittees at the start of the permit term. The MOU's outline the exchange of services between units of County government for implementation of the Storm Water Management Program as cooperators and service providers. To

maximize the agreements, representatives from each agency have been selected to participate on more focused subcommittees. Subcommittees have been established to oversee each of the six control measures.

On February 2, 2007, the Board of Mahoning County Commissioners, by recommendation of the Mahoning County Engineers Office, adopted legislation to abate soil erosion and sediment from earth disturbing construction projects of one (1) acre or more. The legislation referred to as the "Mahoning County Erosion and Sediment Control Rules" is effective as of March 3, 2007 and will be an addition to the Mahoning County Drainage and Erosion and Sedimentation Control Manual. The Rules meet the requirements of minimum control measure # 4 and include a riparian setback from 25'-125' dependant upon the contributing drainage area for all regulated sites. The Mahoning County Engineers Office, by subsequent resolution of the Board of County Commissioners, has been named administrator of the Rules. In addition, the Mahoning County Engineers Office has prepared model zoning legislation requiring an erosion and sediment control plan for 1 acre disturbances, approved by the Mahoning County Soil and Water Conservation District, prior to the issuance of a zoning certificate. Also, the Mahoning County Building Department has added SWP3 requirements to the application checklist for a building permit.

The storm sewer outfall inventory protocol has been finalized and outfall mapping has been initiated. The county-owned outfalls will be completed first followed by metro-park and township outfalls. A Microsoft Access database has been created which allows for download of field-collected G.P.S. data. The data will be added to the Mahoning County GIS system for easy access to all potential users. A goal has been established to complete the outfall inventory and perform visual field observations by fall of 2007.

The Mahoning County District Board of Health has initiated G.P.S. mapping of all on-lot and off-lot septic systems within the Urbanized Area of the County. The data is maintained and continually updated in a Microsoft Access database maintained by the District Board of Health and captured data is currently accessible on the Mahoning County G.I.S. system. The data will be compiled for the final report and presented in a single map and list of addresses of all known off-lot.

In addition to the riparian setback requirements of the Mahoning County Erosion and Sediment Control Rules, stand-alone Riparian Setback Ordinances have been adopted in Beaver Township, Boardman Township, Poland Township and are currently being proposed in Canfield and Austintown Townships.

A Pollution Prevention/Good Housekeeping Workshop was held in February of 2007 for the County and all Co-permitted road and street department and maintenance personnel. Program information was presented and several protocols were discussed including, material storage and inventory, facilities inspection, spill response, proper disposal and outfall observation. In addition, a pollution prevention/good housekeeping guidance document is being created for all regional members in the MCSWMP. The document is

to serve as a training module for current employees to guide their municipal operations and as a training and review document for new employees.

The table below shows the number of square miles encompassed by each of the co-permittees MS4 regulated areas and associated watershed location. This table continues to be included for payment of the Annual Discharge Fee. While rural portions of the County are not served by sewers, the majority of the regulated area is sewered.

SWMP Co-Permitted Entities	Area (miles <sup>2</sup> )	Major Watersheds
Mahoning County	58	Mahoning River, Little Beaver Creek
Austintown Township	19.7	Mahoning River
Beaver Township	1.1	Mahoning River
Boardman Township	22.5	Mahoning River
Canfield Township	7.36	Mahoning River
Coitsville Township	0.12	Mahoning River
Poland Township	1.3	Mahoning River, Little Beaver Creek
Springfield Township	6.8	Mahoning River, Little Beaver Creek
Mill Creek Metro Park	4.06	Mahoning River
<b>Total Estimated Regulated Area</b>	<b>120.93</b>	

The storm water drainage system for Mahoning County and the Townships is a combination of ditches that run parallel to County and Township roads, and a limited number of closed pipe systems. The majority of the closed pipe systems are located in subdivisions. Mahoning County and the regulated portions of the Townships are assessing options on how to potentially deal with public/private detention or retention basins. They are looking at potential attributes to collect on these devices during the inventory.

Mahoning County's Storm Water Management Plan and Drainage Manual continue to form the foundation of the County's storm water drainage and water quality programs. The SWMP acts to unify a wide variety of County programs, such as training, operations and maintenance and construction, under a common focus on water quality issues. The water quality benefits of our BMPs are supported by research or common sense approaches to reducing storm water pollution within the framework of the County's organization and mission.

## Annual Report Form

### Mahoning County and Co-Permittee Storm Water Management Plan

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April 3, 2006-April 3, 2007

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#### **Control Measure 1 & 2 – Public Education and Outreach on Storm Water Impacts & Public Involvement/Participation**

Permit Requirement. Each Co-permittee must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

Permit Requirement. Each Co-permittee must at a minimum, comply with State and local public notice requirements when implementing a public involvement/participation program. In the case of non-traditional MS4's (e.g., ODOT, universities, hospitals, prisons, military bases, and other government complexes), each Co-permittee is required to involve employees, on-site contractors and individuals using your facilities.

#### **BMP 1.1:** Storm Water Committee

**Description:** County Committee participants: County Engineer, Mahoning County District Board of Health, County Planning Commission, Soil & Water Conservation District (SWCD), Sanitary Engineer, Prosecutor's Office, Board of Commissioners, and Mill Creek Metro Park and County Building and GIS Departments. In addition, each township has representatives which assist trustees with implementation of the SWMP. These include township administrators, zoning and road and street superintendents.

**Compliance with Permit Conditions:** Sections 3.2.1.2.2 and 3.2.1.2.4

**Time Frame:** Annual

**Measurable Goal:** Number of meetings per year (at least four).

☐ BMP development begun but BMP not yet completely implemented

☒ BMP implemented and fourth year measurable goals met

- \_\_\_\_\_ BMP is completed and fourth year measurable goals met
- \_\_\_\_\_ BMP is implemented, however, evaluation data not yet available
- \_\_\_\_\_ BMP implementation moved to subsequent year
- \_\_\_\_\_ BMP has been revised. See below for a description of the revision
- \_\_\_\_\_ Co-permitees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *The county storm water committee was divided into subcommittees during the permit year to provide additional focus for the individual control measures. The following subcommittees met during the permit term: Public Education/Involvement, Illicit Discharge, Construction/Post-construction and Good Housekeeping. A total of nine (9) subcommittee meetings were held and township personnel were included in those meetings. In addition, each township attended an informational meeting in January 2007 at the County Engineers office where they were updated in the status of the storm water program implementation and recommendations of activities to be undertaken during the final year of the permit term were discussed.*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? \_\_\_\_\_yes      \_\_\_\_\_Xno

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**BMP 1.2:**      Public and Private Storm Water Involvement and Implementation

**Description:** Public Hearings for proposed regulations or ordinances, memorandums of understanding, volunteer activities, township meetings, watershed group meetings and initiatives.

**Compliance with Permit Conditions:** Sections 3.2.1.2.3 and 3.2.2.2.3

**Time Frame:** Annual

**Measurable Goal:** Number of involvement opportunities annually

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

  X   BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

\_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

\_\_\_\_\_ BMP has been revised. See below for a description of the revision

\_\_\_\_\_ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Two (2) public hearings were held in January at the County Commissioners hearing room to discuss the proposed Mahoning County Erosion and Sediment Control Rules. Attendance was limited to less than 15 individuals for both hearings. Four (4) public presentations discussing Phase II were given at the following regularly scheduled trustee meetings: Austintown, Boardman, Canfield and Poland townships. The watershed group AWARE, comprised of public, private and non-profit members met monthly throughout the permit year. A Phase II update is provided at each meeting and one storm water program presentation was given. Average attendance is approximately 15. Volunteer opportunities for stream monitoring are advocated by the group. E.P.A.C., the regional environmental policy advisory committee held four (4) regional meetings with presentations on storm water management, wetlands and recycling. The meetings were open to public and private interest.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *MOU's between units of County government will be reviewed following the five year permit term. MOU's for co-permittees will be evaluated as well.*

Attachments included for this BMP? \_\_\_\_\_yes        X  no

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**BMP 1.3:** Newsletters and other printed media

**Description:** Create newsletter articles to be included in local community, Mahoning Matters, Pipeline, SWCD and other newsletters highlighting storm water educational messages and announcements. Target Audience: Adult residents and young adults

**Compliance with Permit Conditions:** Section 3.2.1.2.5

**Time Frame:** Annual and ongoing

**Measurable Goal:** Number of articles published annually and circulation

☐ BMP development begun but BMP not yet completely implemented

☒ BMP implemented and fourth year measurable goals met

☐ BMP is completed and fourth years measurable goals met

☐ BMP is implemented, however, evaluation data not yet available

☐ BMP implementation moved to subsequent year

☐ BMP has been revised. See below for a description of the revision

☒ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Drafted storm water or erosion control article in four (4) Mahoning Matters publications, circulation approximately 419,000, and the Mahoning County Sanitary Engineers "Pipeline" publication continued annual circulation of approximately 40,000.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *Several new articles were drafted with a new consistent theme for year five. These articles were reviewed by the education/involvement subcommittee and approved by distribution into new publications that haven't been utilized. The Mahoning County Education and Involvement subcommittee plans to expand storm water outreach in the following year. Articles and information will be published in the local "Review" newspaper, circulation 13,000 per week and local "Town Crier", circulation currently unknown in an effort to reach more of the target audience. In addition, a consistent theme has been established for the following year. The focus is the proper disposal of household hazardous waste, illegal dumping and pollution prevention.*

Attachments included for this BMP? \_\_\_\_\_yes      X  no

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**BMP 1.4:**        Storm Water Education Programs

**Description:**    Conduct annual presentations in schools on storm water related topics for primary and secondary school children. Storm water workshops including erosion and sediment control, septic system regulations, good housekeeping. New homeowner septic maintenance videos and annual storm water presentations at township meetings.

**Compliance with Permit Conditions:** Sections 3.2.1.2.3, 3.2.1.2.5 and 3.2.2.2.4

**Time Frame:** Annual

**Measurable Goal:** Number of classroom presentations provided and attendance

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

  X  \_\_\_\_\_ BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth year measurable goals met

\_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

\_\_\_\_\_ BMP has been revised. See below for a description of the revision

  X  \_\_\_\_\_ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *The Mahoning County District Board of Health provided a one (1) press release announcing the mailing of pumping reminders for each co-permitted township. Septic pumping reminders were mailed to the township residents as follows: Austintown-629, Beaver-1,009, Boardman-221, Canfield-704, Coitsville-348, Poland-556, Springfield-1,071*

*The Green Team classroom education consisted of 454 classroom and youth group presentations, 72 adult group presentations and 82 business or government presentations for a total audience nearly 18,000.*

*\*See attachment 1.0*

*The Mahoning Soil and Water Conservation District held four (4) “Block Parties” for riparian landowners providing demonstrations of the enviroscape non-point source pollution model and supplied rainbarrels to all participants. Estimated attendance at the “Block Parties” was nearly 200. The SWCD and Mahoning County Engineers partnered with the Home Builders Association of the Mahoning Valley to provide two (2) Erosion and Sediment Control Workshops with a total attendance of approximately 60. The SWCD conducted six (6) enviroscape demonstrations at the Canfield Fair to a total audience of approximately 90.*

*\*See attachment 1.1*

*Annual township meetings were held in January 2006 and storm water presentations were given to all co-permitted townships.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *BMP achieved through a combination of Mahoning Soil and Water Education Programs and The Green Team. Mahoning SWCD has reinstituted a full-time education position. As outlined in the MCSWMP, the SWCD plays an important role in the overall implementation of the program. Funding permitted, the SWCD will increase their presence in the classroom and seek to provide additional involvement activities such as stream monitoring.*

Attachments included for this BMP?   X  yes                no

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**BMP 1.5:** Mahoning County Storm Water Management Web page

**Description:** Create and maintain web pages hosted by the Mahoning County Engineers linked from the Mahoning County Homepage and other County agencies or Township webpages highlighting storm water educational messages and announcements.  
Target Audience: Adult residents and young adults

**Compliance with Permit Conditions:** Sections 3.2.1.2.3, 3.2.1.2.5, and 3.2.2.2.4 and 3.2.4.3.1

**Time Frame:** Update and maintain webpage and links

**Measurable Goal:** Number of webpage hits per year is not available

           BMP development begun but BMP not yet completely implemented

☒ BMP implemented and measurable goals met

☐ BMP is completed and fourth year measurable goals met

☐ BMP is implemented, however, evaluation data not yet available

☐ BMP implementation moved to subsequent year

☐ BMP has been revised. See below for a description of the revision

☒ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *The Mahoning County Engineers Office created a Storm Water section on their website to educate residents about steps they can take to reduce pollutants in storm water runoff. The site provides information for pollution prevention, erosion and sediment control, general education and links to other sites including, USEPA, the Green Team and the District Board of Health.*

[www.mahoningcountyoh.gov/MahoningWeb/Department+and+Agencies/Department/Engineer/Storm+Water+Management](http://www.mahoningcountyoh.gov/MahoningWeb/Department+and+Agencies/Department/Engineer/Storm+Water+Management)

BMP comments, evaluation, revisions and activities to be taken during the next program year: *The year 5 goals include links to the County website from all co-permitted entities that maintain websites and interagency links through the District Board of Health, Soil and Water Conservation District, Green Team and Sanitary Engineers. In addition, websites will be updated and maintained as necessary.*

Attachments included for this BMP? ☐yes ☒no

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**BMP 1.6:** Community Activities

**Description:** Earth Day community clean-ups, AWARE Watershed Festival/Block Parties, Canfield Fair

**Compliance with Permit Conditions:** Sections 3.2.1.2.3, 3.2.1.2.5, and 3.2.2.2

**Time Frame:** Annual

**Measurable Goal:** Number of events held annually, participation and litter collected

☐ BMP development begun but BMP not yet completely implemented

☒ BMP implemented and fourth year measurable goals met

☐ BMP is completed and fourth years measurable goals met

☐ BMP is implemented, however, evaluation data not yet available

☐ BMP implementation moved to subsequent year

☐ BMP has been revised. See below for a description of the revision

☒ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Earth Day clean-up was held on April 22, 2006 at Mill Creek Metroparks and advertised with the assistance of the co-permittees. The event was attended by 466 participants with a total of ninety-four (94) bags of trash and fifty-four bags of recyclables collected. Springfield township also had an Earth Day clean up collecting approximately 180 bags of roadside trash. Displays containing storm water information were set up at the Canfield Fair by the Soil and Water Conservation District, County Engineers and the Green Team. The SWCD held 4 block parties for riparian landowners to discuss non-point source pollution and storm water management including offering rain-barrels for residents, enviroscape model and riparian land management.*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? ☐ yes ☒ no

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**BMP 1.7:** Brochures, Flyers, Fact sheets, and Handouts

**Description:** Create a series of brochures, flyers and fact sheets that correspond with messages of the storm water education campaign. Target Audience: Adult residents and school-aged children

**Compliance with Permit Conditions:** Sections 3.2.1.2.3, 3.2.1.2.5, and 3.2.2.2.4

**Time Frame:** on-going

**Measurable Goal:** number of brochures, flyers, fact sheets and handouts distributed per year

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

  X   BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

\_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

\_\_\_\_\_ BMP has been revised. See below for a description of the revision

  X   Co-permitees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *The Mahoning County Engineers created a series of brochures in 2006 containing storm water education messages including “Good Housekeeping for Mahoning County Residents” a brochure outlining reducing household pollution, “You May be Polluting your Watershed” outlining the connectivity between watersheds and the storm drain system and the USEPA “After the Storm” brochure. Nearly 8,000 brochures were distributed to township administration buildings, and an additional 2,000 to county facilities and at classroom functions.*

*The Green Team distributed approximately 3,500 brochures, 864 calendars, 1,250 flyers and 3,500 coloring books and “Stop Junk Mail Cards”*

*\*See attachment 1.0*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *The SWCD will be including the “Conservation Car Wash Tips” fact sheet in the summer issue of Mahoning Matters in an effort to reach more residents.*

Attachments included for this BMP?   X  yes      \_\_\_\_\_no

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### **Control Measure 3 – Illicit Discharge Detection and Elimination**

Permit Requirement. Each Co-Permittee must:

- Develop, implement and enforce a program to detect and eliminate illicit discharges into each Co-permittee small MS4 (for illicit discharges to your MS4 via an adjacent, outside of your jurisdiction, interconnected MS4, you are only required to inform the neighboring MS4 and Ohio EPA in your annual report submission, of their existence);
- Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all surface waters of the State of Ohio that receive discharges from those outfalls. This map should also show the location of all HSTS's connected to your MS4. This map shall include details on the type and size of conduits/ditches in your MS4 that receive discharges from HSTS's, as well as the water bodies receiving discharges from your MS4.
- Develop a list of all on-site sewage disposal systems connected to discharge to your MS4 (a.k.a. home sewage treatment systems (HSTS's) including the addresses; and
- To the extent allowable under state or local law, effectively prohibit, through ordinance, or other regulatory mechanism, illicit discharges into your storm sewer system and implement appropriate enforcement procedures and actions;
- Develop and implement a plan to detect and eliminate non-storm water discharges, including illegal dumping, to your system;
- Inform public employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste

#### **BMP 3.1: Map Storm Water Sewer System Outfalls**

**Description:** Development of a base map for each co-permittee using the Mahoning County GIS system, field data collection by sub-meter GPS and finalized outfall map with associated Access Database.

**Compliance with Permit Conditions:** Sections 3.2.3.1.2 and 3.2.3.2.1

**Time Frame:** December 2003

**Measurable Goal:** Creation of preliminary storm sewer outfall base map

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

  X   BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth year measurable goals met

\_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

\_\_\_\_\_ BMP has been revised. See below for a description of the revision

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *The County Engineers Office has led the outfall mapping initiative in 2006. Preliminary storm sewer outfall maps have been created by the County Engineers Office for all co-permittees. Training has been conducted for all township road and street department personnel in the co-permitted MS4's on location of outfalls using ODOT protocol. Mapping has been initiated for all County-owned outfalls using sub-meter GPS locating. Mapping of County-owned outfalls was started in the fall of 2006. The County Engineers office purchased the equipment required to complete the mapping and the service will be offered to all co-permittees. A Microsoft Access database based on the format created by the Cuyahoga County Health Department and Northeastern Ohio Regional Sewer District outfall database is being used for the collection of outfalls in Mahoning County.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *A goal has been established to complete outfall mapping in all regulated areas by late fall of 2007. Co-permittees will field locate outfalls using preliminary base maps and the County Engineers Office will assist with GPS locating, finalized mapping and incorporation of data into the Mahoning County Outfall Database. All data will be posted on the County GIS website when completed.*

*\*See attachment 1.2*

Attachments included for this BMP?   X  yes    \_\_\_\_\_no

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**BMP 3.2:**            List/Map/Record outfall locations of HSTS

**Description:** Map and record location of all HSTS connected to the storm sewer system.

**Compliance with Permit Conditions:** Sections 3.2.3.1.2.1.1, 3.2.3.1.2.1.2, 3.2.3.2.1 and 4.3.1

**Time Frame:** Annually with a completion date by the end of the permit term.

**Measurable Goal:** Completion of GIS layer on the Mahoning County GIS System.

☒ BMP development begun but BMP not yet completely implemented

☐ BMP implemented and fourth year measurable goals met

☐ BMP is completed and fourth years measurable goals met

☐ BMP is implemented, however, evaluation data not yet available

☐ BMP implementation moved to subsequent year

☐ BMP has been revised. See below for a description of the revision

☒ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *An active participant in the Illicit Discharge Subcommittee, the District Board of Health has field located approximately 500 discharging HSTS and over 100 on-lot HSTS by GPS. The office maintains a Microsoft Access database of all mapped HSTS's and has incorporated the information into the Mahoning County GIS System. The District Board of Health has continued mapping beyond the designated Urbanized Area with a goal of completing the entire County over time.*

*\*See attachment 1.7*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *A map and list of all discharging HSTS will be provided with the year five annual report. The data can currently be viewed on the County GIS site at:*

*<http://gis.mahoningcountyoh.gov/>*

Attachments included for this BMP? ☒ yes ☐ no

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**BMP 3.3:** Develop program to detect and eliminate illicit discharges

**Description:** Observation of storm sewer outfalls during periods of dry weather. Record any visual or odorous observations and estimate flow rates. Development of a compliance document for use by employees at public facilities.

**Compliance with Permit Conditions:** Sections 3.2.3.1.3, 3.2.3.1.4, 3.2.3.1.5, 3.2.3.2.2., 3.2.3.2.3, 3.2.3.2.4, 3.2.3.2.4.1, 3.2.3.2.4.2, 3.2.3.2.4.3, 3.2.3.2.4.4

**Time Frame:** Initiate work in year five until completed

**Measurable Goal:** Completion of data entry by fall of 2007. Completion of HSTS mapping by March 2008

☒ BMP development begun but BMP not yet completely implemented

☐ BMP implemented and second year measurable goals met

☐ BMP is completed and second years measurable goals met

☐ BMP is implemented, however, evaluation data not yet available

☐ BMP implementation moved to subsequent year

☐ BMP has been revised. See below for a description of the revision

☒ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *BMP is currently in development.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *Mahoning County and all co-permitted MS4's have set a goal to have initial dry-weather flow observations performed by late fall of 2007. A protocol is currently being established for the elimination of illicit discharges. It appears that county and township government lack the legal authority to regulate through ordinance, discharges other than sewage, sediment and illegal dumping to the MS4. Therefore, the protocol will include the above mentioned discharges and discharges from commercial and industrial facilities by the appropriate agency or department. Flows composed of residential septic will be referred to the District Board of Health, Sediment Discharge will be referred to the SWCD, and illegal dumping of litter will be referred to the Solid Waste District. Other discharges will be the referred to the Ohio EPA. In addition, a pollution prevention/good housekeeping guidance document is being created for all regional members in the MCSWMP. The document is to serve as a training module for current employees to guide their municipal operations and as a training and review document for new employees. Also, the guidance document contains forms for self inspection for storm water*

*discharges, non-storm discharges and spill response. The inspections are to be conducted on a quarterly basis and spill response forms as needed.*

Attachments included for this BMP? \_\_\_\_\_yes        X  no

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**BMP 3.4:**            Adopt regulations prohibiting illicit discharges

**Description:**     Develop legislation and enforcement mechanisms to control and eliminate illicit discharges. Development of protocol or ordinance language for the elimination of illicit discharges.

**Compliance with Permit Conditions:** See BMP 3.3 for permit sections

**Time Frame:** Year four and five

**Measurable Goal:** Number of enforcement or corrective actions taken annually to eliminate illicit discharges.

  X   BMP development begun but BMP not yet completely implemented

\_\_\_\_\_ BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

\_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

\_\_\_\_\_ BMP has been revised. See below for a description of the revision

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *BMP is currently being developed. Two (2) illicit discharge sub-committee meetings were held to discuss the development of this BMP.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *A protocol is currently being established for the elimination of illicit discharges. It appears that county and township government lack the legal authority to regulate through ordinance, discharges other than sewage, sediment and illegal dumping to the MS4. Therefore, the protocol will include the above mentioned discharges for which*

*regulations do exist. Discharges from commercial and industrial facilities will be referred by the appropriate agency or department to the EPA. Based on a meeting with Ohio EPA on January 24, 2007, this will be an appropriate approach until legal authority to implement the BMP fully is established. Until then, this BMP will be implemented to the maximum extent practical under state law.*

Attachments included for this BMP? \_\_\_\_\_yes    ☒no

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**BMP 3.5:**            Total Maximum Daily Load (TMDL) (OEPA Permit Section 1.3.6)

**Description:**       Determine amount of pollutant needed to be reduced in impaired stream and how sampling will be conducted to verify reductions

Compliance with Permit Conditions: Section 1.3.6. 2. OEPA Construction General Permit

**Time Frame:** As required

**Measurable Goal:** Documentation of target reductions in the TMDL designated pollutant

☒ BMP does not currently apply

\_\_\_\_\_ BMP implemented and second year measurable goals met

\_\_\_\_\_ BMP is completed and second years measurable goals met

\_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

\_\_\_\_\_ BMP has been revised. See below for a description of the revision

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal:

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? \_\_\_\_\_yes    ☒no

#### **Control Measure 4 – Construction Site Storm Water Runoff Control**

Permit Requirement. Each Co-Permittee must develop, implement and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of pollutants in storm water discharges from construction activities less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

Each Co-Permittee program must include the development and implementation of, at a minimum:

- An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law;
- Requirements for construction site operators to implement appropriate erosion and sediment control BMP's;
- Requirements for construction site operators to control waste such as discarded building materials , concrete truck washout, chemicals, litter and sanitary waste at the construction site that may cause adverse impacts to water quality;
- Procedures for site plan review which incorporate consideration of potential water quality impacts;
- Procedures for receipt and consideration of information submitted by the public; and
- Procedures for site inspection and enforcement of control measures.

**BMP 4.1:** Adopt enhanced erosion and sediment control regulations

**Description:** Establish erosion and sediment control legislation for sites greater than or equal to one acre in size. Incorporate the requirements of the Ohio EPA Construction Permit including erosion and sediment control BMP's and waste materials management.

**Compliance with Permit Conditions:** Sections 3.2.4.1.1, 3.2.4.1.2, 3.2.4.1.3, 3.2.4.1.4, 3.2.4.1.6, 3.2.4.2.1, 3.2.4.2.2, 3.2.4.2.3

**Time Frame:** Year four

**Measurable Goal:** Enact erosion and sediment control regulation

- \_\_\_\_\_ BMP development begun but BMP not yet completely implemented
- \_\_\_\_\_ BMP implemented and fourth year measurable goals met
- X   BMP is completed and fourth years measurable goals met
- \_\_\_\_\_ BMP is implemented, however, evaluation data not yet available
- \_\_\_\_\_ BMP implementation moved to subsequent year
- \_\_\_\_\_ BMP has been revised. See below for a description of the revision
- X   Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *On February 1, 2007, by recommendation of the Mahoning County Engineers Office, the Mahoning County Board of Commissioners adopted a stand alone regulation referred to as the Mahoning County Erosion and Sediment Control Rules. The Rules were adopted in accordance with the authority given to the Board by O.R.C 307.79. The legislation will apply to unincorporated areas of Mahoning County. The Rules give stop work authority for non-compliant construction sites.*

*\*See attachment 1.3: Mahoning County Erosion and Sediment Control Rules*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *In addition to the County Erosion and Sediment Control Rules, each co-permitted township has been encouraged to adopt a model zoning ordinance referring to the County Rules for additional enforcement at the local level.*

Attachments included for this BMP?   X  yes      \_\_\_\_\_no

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**BMP 4.2:**            Workshop on Erosion & Sediment Control Regulations

**Description:**      Conduct BMP training sessions for contractors, developers and engineers on construction permit compliance

**Compliance with Permit Conditions:** See BMP 4.1 for permit sections

**Time Frame:** Annual

**Measurable Goal:** Number of attendees each year

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

\_\_\_\_\_ BMP implemented and second year measurable goals met

  X   BMP is completed and fourth years measurable goals met

\_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

\_\_\_\_\_ BMP has been revised. See below for a description of the revision

  X   Co-permitees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Two (2) workshops were held with an attendance total of approximately 60. The two events were offered to area engineers, contractors and developers. The recently adopted County Erosion and Sediment Control Rules were discussed as well as presentations by OEPA and the USACE discussing wetland regulations and permit requirements contained in the local Rules.*

*\*See attachment 1.4*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP?   X  yes      \_\_\_\_\_no

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**BMP 4.3:**            Enter into Memorandum of Understanding (MOU) with SWCD

**Description:**      Establish and maintain a working agreement with the SWCD for review and inspection of construction projects disturbing one or more acres of land area.

**Compliance with Permit Conditions:** Sections 3.2.4.2.2 and 3.2.4.3.4

**Time Frame:** On-going

**Measurable Goal:** Annual MOU established and/or maintained

☐ BMP development begun but BMP not yet completely implemented

☒ BMP implemented and fourth year measurable goals met

☐ BMP is completed and fourth years measurable goals met

☐ BMP is implemented, however, evaluation data not yet available

☐ BMP implementation moved to subsequent year

☐ BMP has been revised. See below for a description of the revision

☒ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *An MOU between the county, co-permittees and the SWCD has been established since the beginning of the permit term. The MOU is reviewed annually and changes considered based on SWCD availability due to potential funding limitations.*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? ☐ yes ☒ no

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**BMP 4.4:** Review Erosion & Sediment Control Plans/Storm Water Pollution Prevention Plans (SWPPP)

**Description:**

**Compliance with Permit Conditions:** Section 3.2.4.1.4

**Time Frame:** Annual

**Measurable Goal:** Number of sites inspected each year

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

\_\_\_X\_\_\_ BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

\_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

\_\_\_\_\_ BMP has been revised. See below for a description of the revision

\_\_\_X\_\_\_ Co-permitees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *The Mahoning County Engineers Office Reviewed 55 SWP3's and the SWCD completed 31 Plan Reviews.*

*\*See attachment 1.5*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *A written protocol has been established for the review of SWP3's to provide for a more consistent approach to the review process.*

*\*See attachment 1.6*

Attachments included for this BMP? \_\_\_X\_\_\_yes \_\_\_\_\_no

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**BMP 4.5:** Inspect Active Sites

**Description:** Conduct on-site inspections of active construction sites greater than or equal to one acre or less than one acre if part of a larger common plan of development for compliance with E&SC requirements.

Establish and maintain procedures for responding to public complaints and concerns regarding land disturbing sites.

**Compliance with Permit Conditions:** Section 3.2.4.1.6

**Time Frame:** On-going

**Measurable Goal:** Number of complaints responded to annually

- \_\_\_\_\_ BMP development begun but BMP not yet completely implemented
- \_\_\_\_\_ BMP implemented and fourth year measurable goals met
- \_\_\_\_\_ BMP is completed and fourth years measurable goals met
- \_\_\_\_\_ BMP is implemented, however, evaluation data not yet available
- \_\_\_\_\_ BMP implementation moved to subsequent year
- X   Co-permitees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Mahoning SWCD performed 269 site inspections for compliance with the Ohio EPA Construction General Permit*

*\*See attachment 1.5*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP?   X  yes      \_\_\_\_\_no

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**BMP 4.6:**            Enforcement Actions

**Description:**      Authority for issuances of violation notices or stop work orders on non-compliant construction projects

**Compliance with Permit Conditions:** Section 3.2.4.2.6

**Time Frame:** On-going

**Measurable Goal:** Number of orders or violations issued annually

- \_\_\_\_\_ BMP development begun but BMP not yet completely implemented
- X   BMP implemented and fourth year measurable goals met
- \_\_\_\_\_ BMP is completed and fourth years measurable goals met
- \_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

\_\_\_X\_\_\_ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *The Mahoning County Board of Commissioners adopted local erosion and sediment control rules in February of 2007 under the authority given them by O.R.C §307.79. The county now has true authority to issue NOV's and stop work orders. The SWCD issued eight (8) NOV's for sites not meeting the performance standards of the OEPA Construction General Permit.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *This will be the first year that the County has had true stop work authority. It is expected that the number of orders will increase in year five.*

Attachments included for this BMP? \_\_\_\_\_yes    \_\_\_X\_\_\_no

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**BMP 4.7:**            Respond to public complaints regarding construction activities

**Description:**      Establish and maintain procedures for responding to public complaints and concerns regarding land disturbing sites.

**Compliance with Permit Conditions:** Section 3.2.4.2.5

**Time Frame:** On-going

**Measurable Goal:** Number of complaints responded to annually

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

\_\_\_\_\_ BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

\_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

\_\_\_X\_\_\_ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Mahoning SWCD responded to 27 Public Complaints regarding drainage, erosion wetlands or construction site runoff*

*\*See attachment 1.5*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? ☒ yes ☐ no

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**BMP 4.8:** Develop Updated Erosion & Sediment Control Inspection Checklist

**Description:** Establish and maintain inspection checklist based on updated ESC requirements

**Compliance with Permit Conditions:** Section 3.2.4.2.4

**Time Frame:** On-going

**Measurable Goal:** Maintaining current checklist and number of sites checklist was applied on.

☐ BMP development begun but BMP not yet completely implemented

☒ BMP implemented and fourth year measurable goals met

☐ BMP is completed and fourth year measurable goals met

☐ BMP is implemented, however, evaluation data not yet available

☐ BMP implementation moved to subsequent year

☒ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Erosion and Sediment Control Checklists are available and provided if requested for contractors and developers. The checklist is part of the work-log for active sites and as a SWPPP guidance document for engineers and plan review by the SWCD. In addition the SWPPP guidance document developed by Lake County Storm*

*Water Department has been modified to fit the local ESC requirements of Mahoning County.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *The SWPPP Guidance document developed by Lake County Storm Water Department, as modified by Mahoning County will be available on-line as a tool for engineers and designers of projects in Mahoning County.*

Attachments included for this BMP? \_\_\_\_\_yes      X  no

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**BMP 4.9:**            Concrete Truck Wash Out

**Description:**      Develop standard drawing and procedures for concrete truck wash out

**Compliance with Permit Conditions:** Section 3.2.4.1.3

**Time Frame:** On-going

**Measurable Goal:** Number of complaints responded to annually

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

  X   BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

\_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

  X   Co-permitees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Guidelines for concrete truck washout are outlined in the Mahoning County Erosion and Sediment Control Rules. Standards and specification from the revised 2006 edition of the Rainwater and Land Development Manual are required by the Rules.*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? \_\_\_\_\_yes    ☒no

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**BMP 4.10:**            Construction Site Ingress/Egress

**Description:**      Develop standard drawing and procedures for ingress/egress during construction

**Compliance with Permit Conditions:** Section 3.2.4.1.3

**Time Frame:** On-going

**Measurable Goal:** Number of complaints responded to annually

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

☒ BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

\_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

☒ Co-permitees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Guidelines construction site ingress/egress is outlined in the Mahoning County Erosion and Sediment Control Rules. Standards and specification from the revised 2006 edition of the Rainwater and Land Development Manual are required by the Rules. In addition, the Mahoning County Engineers Office requires driveway permits for all new ingress/egress areas on county roads. The ODNR Rainwater and Land Development Manual specifications are required to be followed for those areas on county roads.*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? \_\_\_\_\_yes    ☒no

## **Control Measure 5 – Post Construction Storm Water Management in New Development and Redevelopment**

Permit Requirement. Each Co-Permittee must:

- develop, implement and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge to your small MS4. Your program must ensure that controls are in place that would prevent or minimize water quality impacts;
- Develop and implement strategies which include a combination of structural and/or non-structural BMP's appropriate for your community;
- Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law; and
- Ensure adequate long term operation and maintenance of BMP's

**BMP 5.1:** Post-Construction Storm Water Management BMPs

**Description:** Adopt an improved, Phase II compliant storm water management regulation that addresses both storm water quantity and quality.

**Compliance with Permit Conditions:** Construction General Permit - section Part II G.2

**Time Frame:** February 2005

**Measurable Goal:** passage of regulation

☐ BMP development begun but BMP not yet completely implemented

☒ BMP implemented and fourth year measurable goals met

☐ BMP is completed and fourth years measurable goals met

☐ BMP is implemented, however, evaluation data not yet available

☐ BMP implementation moved to subsequent year

☒ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *BMP's 5.1.1 through 5.1.6 were developed to address the post-construction runoff control requirements in the construction general permit. BMP's 5.1.1-5.1.6 are detailed in the Mahoning County Drainage and Erosion and Sedimentation Control Manual adopted by the Board of Mahoning County Commissioners in April of 2005. The Manual also meets the water quality volume requirements for extended detention in the construction general permit.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *The Mahoning County Drainage and Erosion and Sedimentation Control Manual will be modified to include the 2007 Mahoning County Erosion and Sediment Control Rules which outline enforcement and additional administrative powers given to the Mahoning County Engineers Office by the Board of Mahoning County Commissioners.*

Attachments included for this BMP? \_\_\_\_\_yes    ☒no

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**BMP 5.1.1:**            Vegetated Swale/Filter Strip

**Description:**       Post-construction BMP allowable under construction general permit

**Compliance with Permit Conditions:** 1. Sections 3.2.5.2.4, 3.2.5.2.4.2 and 3.2.4.2.4.3.  
2. OEPA Construction General Permit (CGP): Post-construction section-part III.G.2.e

**Time Frame:** on-going

**Measurable Goal:** tracking and maintenance

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

\_\_\_\_\_ BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

☒ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

☒ Co-permitees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *BMP detailed in the Mahoning County Drainage and Erosion and Sedimentation Control Manual adopted by the Board of Mahoning County Commissioners in April of 2005.*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? \_\_\_\_\_yes      X  no

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**BMP 5.1.2:**            Extended Detention Basin (Dry)

**Description:**        Post-construction BMP allowable under construction general permit

**Compliance with Permit Conditions:** Sections 3.5.4.2.4, 3.2.5.2.4.2, and 3.2.5.2.4.3. 2. OEPA Construction General Permit (CGP): Post-construction section-part III.G.2.e

**Time Frame:** on-going

**Measurable Goal:** tracking and maintenance

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

\_\_\_\_\_ BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

  X   BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

  X   Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *BMP detailed in the Mahoning County Drainage and Erosion and Sedimentation Control Manual adopted by the Board of Mahoning County Commissioners in April of 2005.*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? \_\_\_\_\_yes      X  no

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**BMP 5.1.3:**            Retention Basin (Wet)

**Description:**        Post-construction BMP allowable under construction general permit

**Compliance with Permit Conditions:** 1. Sections 3.5.4.2.4, 3.2.5.2.42, and 3.2.5.2.4.3.  
2. OEPA Construction General Permit (CGP): Post-construction section-part III.G.2.e

**Time Frame:** on-going

**Measurable Goal:** tracking and maintenance

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

\_\_\_\_\_ BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

  X   BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

  X   Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *BMP detailed in the Mahoning County Drainage and*

*Erosion and Sedimentation Control Manual adopted by the Board of Mahoning County Commissioners in April of 2005.*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? \_\_\_\_\_yes      X  no

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**BMP 5.1.4:**            Constructed Wetlands

**Description:**        Post-construction BMP allowable under construction general permit

**Compliance with Permit Conditions:** 1. Sections 3.5.4.2.4, 3.2.5.2.42, and 3.2.5.2.4.3.  
2. OEPA Construction General Permit (CGP): Post-construction section-part III.G.2.e

**Time Frame:** on-going

**Measurable Goal:** tracking and maintenance

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

\_\_\_\_\_ BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

  X   BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

  X   Co-permitees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *BMP detailed in the Mahoning County Drainage and Erosion and Sedimentation Control Manual adopted by the Board of Mahoning County Commissioners in April of 2005.*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? \_\_\_\_\_yes      X  no

**BMP 5.1.5:**            Bio-retention

**Description:**        Post-construction BMP allowable under construction general permit

**Compliance with Permit Conditions:** 1. Sections 3.5.4.2.4, 3.2.5.2.42, and 3.2.5.2.4.3.  
2. OEPA Construction General Permit (CGP): Post-construction section-part III.G.2.e

**Time Frame:** on-going

**Measurable Goal:** tracking and maintenance

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

\_\_\_\_\_ BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

  X   BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

  X   Co-permitees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *BMP detailed in the Mahoning County Drainage and Erosion and Sedimentation Control Manual adopted by the Board of Mahoning County Commissioners in April of 2005.*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? \_\_\_\_\_yes      X  no

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**BMP 5.1.6:**            Alternative Methods (Manufactured Systems)

**Description:**      Post-construction BMP allowable under construction general permit on an individual basis by request

**Compliance with Permit Conditions:** 1. Sections 3.5.4.2.4, 3.2.5.2.42, and 3.2.5.2.4.3.  
2. OEPA Construction General Permit (CGP): Post-construction section-part III.G.2.e

**Time Frame:** on-going

**Measurable Goal:** tracking and maintenance

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

\_\_\_\_\_ BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

  X   BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

  X   Co-permitees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Manufactured systems are not allowed by the current standards in the Mahoning County Drainage and Erosion and Sedimentation Control Manual. Manufactured systems will only be approved following written proof of approval by Ohio EPA and on a case-by-case basis.*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? \_\_\_\_\_yes      X  no

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**BMP 5.2:** Workshops for Post-Construction Regulations

**Description:** Consider adopting a conservation development regulation that addresses development open space development standards.

**Compliance with Permit Conditions:** Section 3.2.5.2.3.3

**Time Frame:** December 2005

**Measurable Goal:** Progress on regulation development

☐ BMP development begun but BMP not yet completely implemented

☒ BMP implemented and fourth year measurable goals met

☐ BMP is completed and fourth years measurable goals met

☐ BMP is implemented, however, evaluation data not yet available

☐ BMP implementation moved to subsequent year

☒ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Two (2) workshops were held with an attendance total of approximately 60. The two events were offered to area engineers, contractors and developers. The recently adopted County Erosion and Sediment Control Rules which will become part of the overall County Drainage and Erosion and Sedimentation Control Manual were discussed as well as presentations by OEPA discussing the construction general permit and post-construction BMP's and the USACE discussing wetland regulations and permit requirements contained in the local Rules.*

*\*See attachment 1.4*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? ☒yes ☐no

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**BMP 5.3:** Open space preservation (Non-Structural BMP)

**Description:** Consider adopting a conservation development regulation that addresses development open space development standards.

**Compliance with Permit Conditions:** 1. Sections 3.2.5.2.3 and 3.2.5.2.3.1

**Time Frame:** Annual

**Measurable Goal:** Progress on regulation development

☒ BMP development begun but BMP not yet completely implemented

☐ BMP implemented and fourth year measurable goals met

☐ BMP is completed and fourth years measurable goals met

☐ BMP is implemented, however, evaluation data not yet available

☐ BMP implementation moved to subsequent year

☐ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *BMP is being promoted by the Mahoning County Storm Water Management Committee through a combination of updates to the county subdivision regulations and through local zoning. Townships, to the extent practical will consider open space preservation consistent with their zoning resolutions.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *Model legislation will be advocated by the Mahoning County Storm Water Management Committee during the final year of the permit term.*

Attachments included for this BMP? ☐yes ☒no

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**BMP 5.4:** Measures reducing impervious cover (Non-structural BMP)

**Description:** Consider adopting a conservation development regulation that addresses development open space development standards.

**Compliance with Permit Conditions:** 1. Sections 3.2.5.2.3, 3.2.5.3.2.1, and 3.2.5.2.3.4

**Time Frame:** Annual

**Measurable Goal:** Progress on regulation development

☒ **BMP development begun but BMP not yet completely implemented**

☐ **BMP implemented and second year measurable goals met**

☐ **BMP is completed and second years measurable goals met**

☐ **BMP is implemented, however, evaluation data not yet available**

☐ **BMP implementation moved to subsequent year**

☐ **Co-permittees relying on another government entity for implementation**

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *BMP is being promoted by the Mahoning County Storm Water Management Committee through a combination of updates to the county subdivision regulations and through local zoning. Townships, to the extent practical will consider methods to reduce impervious cover consistent with their zoning resolutions.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *Model legislation will be advocated by the Mahoning County Storm Water Management Committee during the final year of the permit term.*

Attachments included for this BMP? ☐ yes ☒ no

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**BMP 5.5:** Conservation residential subdivisions (Non-structural BMP)

**Description:** Consider adopting a conservation development regulation that addresses development open space development standards.

**Compliance with Permit Conditions:** 1. Sections 3.2.5.2.3 and 3.2.5.3.2.1

**Time Frame:** Annual

**Measurable Goal:** Progress on regulation development

☒ BMP development begun but BMP not yet completely implemented

☐ BMP implemented and second year measurable goals met

☐ BMP is completed and second years measurable goals met

☐ BMP is implemented, however, evaluation data not yet available

☐ BMP implementation moved to subsequent year

☐ Co-permitees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *BMP is being promoted by the Mahoning County Storm Water Management Committee through a combination of updates to the county subdivision regulations and through local zoning. Townships, to the extent practical will consider conservation development consistent with their zoning resolutions.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *Model legislation will be advocated by the Mahoning County Storm Water Management Committee during the final year of the permit term.*

Attachments included for this BMP? ☐yes ☒no

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**BMP 5.6:** Riparian and Wetland Setbacks (Non-structural BMP)

**Description:** Consider adopting a conservation development regulation that addresses development open space development standards.

**Compliance with Permit Conditions:** 1. Sections 3.2.5.2.3 and 3.2.5.3.2.1

**Time Frame:** Annual

**Measurable Goal:** Progress on regulation development

☒ **X** BMP development begun but BMP not yet completely implemented

☐ BMP implemented and second year measurable goals met

☐ BMP is completed and second years measurable goals met

☐ BMP is implemented, however, evaluation data not yet available

☐ BMP implementation moved to subsequent year

☐ Co-permitees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *BMP is being promoted by the Mahoning County Storm Water Management Committee through a combination of updates to the county subdivision regulations and through local zoning. Townships, to the extent practical will consider riparian setback legislation consistent with their zoning resolutions. The Mahoning County Erosion and Sediment Control Rules contain a riparian setback for all applicable construction activities disturbing 1 acre and larger. Beaver, Boardman and Poland townships currently require a riparian setback in their local zoning.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *Austintown and Canfield have riparian setback legislation in progress to go before the trustees for adoption.*

Attachments included for this BMP? ☐ yes ☒ **X** no

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## **Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations**

Permit Requirement. Each Co-Permittee must:

- Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations; and
- Using training materials that are available from Ohio EPA or other organizations, your program must include employee training to prevent and reduce storm water pollution from activities from park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

**BMP 6.1:** Controls for reducing or eliminating pollutant discharges from facilities

**Description:** Development of a manual to serve as a guidance document for pollutant reduction from facility operations. Establishment of self-inspection programs and facility reviews at a minimum of one time per year. Implementation of controls or prevention techniques for pollutant reduction at facilities.

**Compliance with Permit Conditions:** Sections 3.2.6.2.1, 3.2.6.2.3.1, 3.2.6.2.3.2, 3.2.6.2.3.3, 3.2.6.2.3.4, 3.2.6.2.4, and 3.2.6.2.5

**Time Frame:** Year four and five

**Measurable Goal:** Complete development of guidance document and minimization of non-storm water discharges from facilities.

☒ BMP development begun but BMP not yet completely implemented

☐ BMP implemented and fourth year measurable goals met

☐ BMP is completed and fourth years measurable goals met

☐ BMP is implemented, however, evaluation data not yet available

☐ BMP implementation moved to subsequent year

☒ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *A pollution prevention/good housekeeping guidance document has been drafted and is near completion. The document is the result of discussion by the pollution prevention/good housekeeping subcommittee. This document outlines self inspections and pollution reduction or elimination at facilities. Maintenance and operations covered include street sweeping, catch basin cleaning, materials storage, fleet maintenance, spill response, vehicle washing and storm sewer system maintenance.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *Guidance document will be completed and incorporated into county and co-permittee community operations.*

Attachments included for this BMP? \_\_\_\_\_yes      X  no

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**BMP 6.2:** County and co-permittee staff education program on pollution prevention – Operations and Maintenance training

**Description:** Development of training materials and annual workshops for county and co-permitttee staff

**Compliance with Permit Conditions:** Sections 3.2.6.1.1 and 3.2.6.1.2

**Time Frame:** on-going

**Measurable Goal:** creation of implementation schedule and percentage of catch basins cleaned annually

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

  X   BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

\_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

X   Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *A workshop was held on February 20, 2007 for all county and co-permitted road and street department personnel and other interested individuals. Topics included all pertaining to BMP 6.1. All personnel received training and example documentation guidelines including aspects of the nearly complete pollution prevention/good housekeeping guidance document. Attendance was approximately 30 people.*

*\*See attachment 1.7*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *Guidance document will be completed and incorporated into county and co-permittee community operations.*

Attachments included for this BMP?   X  yes            no

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**BMP 6.3:**            Street Sweeping and Catch Basin Cleaning

**Description:**      The county and most co-permittees will perform annual street sweeping and catch basin cleaning. Record and track progress of implementation including amount of material collected for disposal. Develop and maintain protocols for maintenance and tracking.

**Compliance with Permit Conditions:** Sections 3.2.6.2.1, 3.2.6.2.3.1, 3.2.6.2.3.2, 3.2.6.2.3.3, 3.2.6.2.3.4, 3.2.6.2.4, and 3.2.6.2.5

**Time Frame:** Annual

**Measurable Goal:** Quantity of street sweepings disposed of annually, number of catch basins cleaned out and inspected annually and development of protocol for maintenance activities.

- ☒ BMP development begun but BMP not yet completely implemented
- ☐ BMP implemented and fourth year measurable goals met
- ☐ BMP is completed and fourth years measurable goals met
- ☐ BMP is implemented, however, evaluation data not yet available
- ☐ BMP implementation moved to subsequent year
- ☒ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Mahoning County and the co-permittees currently perform annual street sweeping of all streets in their respective areas (with the exception of Coitsville and Springfield Townships which have no curbed streets). Springfield, Canfield and Mill Creek subcontract street sweeping. Catch basins are inspected annually and debris removed as needed.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *A pollution prevention/good housekeeping guidance document has been drafted and is near completion. This document will outline maintenance and operations including street sweeping, catch basin cleaning and storm sewer system maintenance with a goal of reducing or preventing the discharge of pollutants in storm water runoff from municipal operations and correcting improper disposal practices.*

Attachments included for this BMP? ☐yes ☒no

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**BMP 6.4:** Salt and De-icing Storage, drainage and applications

**Description:** Storage of salt under roof. Minimize exposure to storm drainage system

**Compliance with Permit Conditions:** Sections 3.2.6.2.1, 3.2.6.2.3.1, 3.2.6.2.3.2, 3.2.6.2.3.3, 3.2.6.2.3.4, 3.2.6.2.4, and 3.2.6.2.5

**Time Frame:** annual

**Measurable Goal:** Storage areas unexposed to storm water. Perimeter drainage and outfall inventory map. Documentation of application procedures and procedures for clean up for spill events at the loading area or during application

☒ BMP development begun but BMP not yet completely implemented

☐ BMP implemented and fourth year measurable goals met

☐ BMP is completed and fourth years measurable goals met

☐ BMP is implemented, however, evaluation data not yet available

☐ BMP implementation moved to subsequent year

☒ Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Mahoning County and co-permittees currently store salt under roof. Training was conducted in February of 2007 on proper procedures for salt storage and spill events at facilities.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *A pollution prevention/good housekeeping guidance document has been drafted and is near completion. This document will outline maintenance and operations including salt storage and application with a goal of reducing or preventing the discharge of pollutants in storm water runoff from salt storage and handling. An outfall inventory map detailing facility surface water drainage and discharges from county and co-permittee maintenance facilities will be included in the guidance document.*

Attachments included for this BMP? ☐ yes ☒ no

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**BMP 6.5:** Storm Water System Maintenance

**Description:** Annual catch basin and/or ditch maintenance and inspections.

**Compliance with Permit Conditions:** Sections 3.2.6.2.1, 3.2.6.2.3.1, 3.2.6.2.3.2, 3.2.6.2.3.3, 3.2.6.2.3.4, 3.2.6.2.4, and 3.2.6.2.5

**Time Frame:** Annual and on-going

**Measurable Goal:** Development of written procedures and standards. Continuation of current maintenance schedule.

☒ **BMP development begun but BMP not yet completely implemented**

☐ **BMP implemented and fourth year measurable goals met**

☐ **BMP is completed and fourth years measurable goals met**

☐ **BMP is implemented, however, evaluation data not yet available**

☐ **BMP implementation moved to subsequent year**

☒ **Co-permittees relying on another government entity for implementation**

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Mahoning County and the co-permittees continued current maintenance schedules. Ditches are maintained on an as-needed basis and to re-establish inverts that have been affected by sedimentation or debris.*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *A written procedure for storm sewer system maintenance will be drafted and included in the pollution prevention/good housekeeping guidance document. The procedure will include inspection criteria for catch basin maintenance and ditch maintenance criteria including reseeding of ditches as a method to reduce erosion and provide for storm water filtration.*

Attachments included for this BMP? \_\_\_\_\_yes      X  no

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**BMP 6.6:**            Fleet Maintenance, vehicle washing, oil and water separators

**Description:**       Review of existing waste disposal practices and recycling and if necessary, develop new programs for proper waste disposal for county and co-permittee operations. Tracking and reporting the handling of fluids, tires and batteries.

**Compliance with Permit Conditions:** Sections 3.2.6.2.1, 3.2.6.2.3.1, 3.2.6.2.3.2, 3.2.6.2.3.3, 3.2.6.2.3.4, 3.2.6.2.4, and 3.2.6.2.5

**Time Frame:** Annual and on-going

**Measurable Goal:** Amount of oil or other fluids disposed of annually. Tracking of other waste streams.

  X   BMP development begun but BMP not yet completely implemented

\_\_\_\_\_ BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

\_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

  X   Co-permittees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *Mahoning County and the co-permittees currently have collection or recycling programs for used motor oil and other automotive fluids in their respective departments. Disposal procedures were discussed and tracking for maintenance programs will continue to be evaluated in annual training events. The County has chosen an on-line tracking method for fluid disposal service in 2006 provided by a private contractor. The service has been promoted to all co-permittees .Oil and water separators are installed at most service facilities*

BMP comments, evaluation, revisions and activities to be taken during the next program year: *BMP has been combined from prior annual report formats in an effort to reflect the more regional approach to storm water management in Mahoning County. Continue updates and review of tracking methods for waste disposal practices. A pollution prevention/good housekeeping guidance document has been drafted and is near completion. This document will outline maintenance and operations including waste handling, disposal and recycling.*

Attachments included for this BMP? \_\_\_\_\_yes      **X**  no

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**BMP 6.7:**            Household Hazardous Waste Drop off

**Description:**       Annual collection of household hazardous waste

**Compliance with Permit Conditions:** Sections 3.2.6.2.4 and 3.2.6.2.5

**Time Frame:** Annual

**Measurable Goal:** Amount of material collected

\_\_\_\_\_ BMP development begun but BMP not yet completely implemented

  **X**   BMP implemented and fourth year measurable goals met

\_\_\_\_\_ BMP is completed and fourth years measurable goals met

\_\_\_\_\_ BMP is implemented, however, evaluation data not yet available

\_\_\_\_\_ BMP implementation moved to subsequent year

  **X**   Co-permitees relying on another government entity for implementation

Number of attendees, legislation, events, programs, etc. achieved in the program year toward the measurable goal: *The Green Team sponsored the 2006 HHW collection event generated 72,660 lbs of waste. 1,289 cars passed through the collection event.*

*\*See attachment 1.0*

BMP comments, evaluation, revisions and activities to be taken during the next program year:

Attachments included for this BMP? \_\_\_\_\_yes      X  no

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**Attachment 1.0**  
**Green Team Summary Table**

Event Description	No. Events	Participants
<b>Education:</b>		
Classroom & Youth Group Presentations	454	13,821
Adult Group Presentations	72	2,119
Business/Government Presentation	82	1,726
Teacher Curriculum Workshops	3	93
Waste Assessments:		
Government	0	
Small Businesses	29	
Science Fairs	8	
Tours/Field Trips	5	333
Compost Workshops	7	420
Placemat contest	1	1137 Students / 28,000 Mats
Home, Safe, Home Workshop		
<b>Media:</b>		
Quarterly Newsletter – “Mahoning Matters”	4	425,600 (Copies)
Television Ads		Not Available Yet
Radio Ads		Not Available Yet
Print Ads		Not Available Yet
Billboard Ads		Not Available Yet
Website		4,860
Brochures		3,500
Calendars		864 (Copies) / + Newspaper Ads
Flyers		1,250 (Copies)
Other "Coloring Books & Stop Junk Mail Cards"		3,500 (Copies)
<b>Cooperative Recycling:</b>		
Build America Beautiful		
Highway Litter Clean-ups		Not Available Yet
Public Park Clean-ups		Not Available Yet
Public Area Clean-ups		Not Available Yet
School Fiber Collection		
“Cash for Cans” Contest		23 Schools
Adopt-a-Spot	3	
Office Paper Recycling		
<b>Special Collection Days:</b>		
Household Hazardous Waste Collection	1	1,289 (Cars)
Electronics Collection	16	544 (Cars)
Appliance Collection (6 sites)		
Wrap-It Up (Holiday wrap & greeting cards) -15 sites		Now included in Drop-off site #'s
Holiday Tree Mulching (16 sites)		
Tire Amnesty		

<b>Other Activities w/ Public Involvement:</b>		
Drop-Off Recycling (35 Sites)		
Curbside Recycling		
Planet Aid - Textile Recycling		
Household Battery Recycling		
Magazine/Catalog Drives		
re:Create		
Boardman Twp. Compost Facility (2005)		
Oil recycling		
Coitsville Twp. Spring Clean-up		Held w/ Appliance Drive

2006 HHW Collection					
Qty	Unit	Description	Unit Price	TOTAL	LBS
20,329	lb.	Paint & Paint Products (Oil)	\$0.225	\$4,574.03	20,329
2,534	lb.	Aerosols	\$1.150	\$2,914.10	2,534
6,849	lb.	Pesticide Liquids/Solids	\$1.150	\$7,876.35	6,849
1,700	lb.	Cleaners (Acids/Bases/Oxidizers)	\$1.150	\$1,955.00	1,700
0	lb.	Reactives (Minimum Charge)	\$50.000	\$0.00	0
3,996	lb.	Adhesives/Roof Tar/Driveway Sealers	\$0.650	\$2,597.40	3,996
2,561	lb.	Antifreeze	\$0.350	\$896.35	2,561
12,999	lb.	Motor Oil	\$0.100	\$1,299.90	12,999
4,036	lb.	Fuels(Kerosene/Gasoline)	\$0.225	\$908.10	4,036
2,354	lb.	Automotive Fluids/Grease	\$0.250	\$588.50	2,354
70	lb.	Mercury	\$2.000	\$140.00	70
1,915	lb.	Reactives	\$2.000	\$3,830.00	1,915
55	lb.	Household Batteries	\$0.900	\$49.50	55
118	ea.	Propane Cylinders (5lb.)	\$10.000	\$1,180.00	590
186	ea.	Propane Cylinders (15lb.)	\$15.000	\$2,790.00	2,790
9,160	lb.	Latex Paint	\$0.185	\$1,694.60	9,160
0	lb.	Lead Acid Batteries	\$0.900	\$0.00	0
677	ea.	Flourescent Bulbs	\$1.000	\$677.00	677
0	ea.	Propane Cylinders (15lb.)	\$15.000	\$0.00	0
0	ea.	Asbsotos for Landfill	\$1.150	\$0.00	0
2	ea.	Chlorodiflouromethane Cylinder (15lb)	\$75.000	\$150.00	15
0	ea.	Carbon Dioxide Cylinder (10 lb)	\$175.000	\$0.00	10
0	ea.	Oxygen Cylinder (15lb)	\$225.000	\$0.00	15
0	ea.	Flourocarbon Cylinder (5lb)	\$75.000	\$0.00	5
0	ea.	Lethal Air Pesticide Cylinder (10lb)	\$650.000	\$0.00	10
				<b>\$34,120.83</b>	<b>72,660</b>

**1289 Cars**

**Attachment 1.1**  
**SWCD Phase II Summary Report**

## SWCD PHASE II REPORT

DATES	EVENTS	# OF ATTENDEES/RECIPIENTS	CONTACT NAME
1/31/2006	Springfield Septic Mailings	1071	Wes Vins
3/8/2006	Beaver Septic Mailings	1009	Wes Vins
3/9/2006	Green Septic Mailings	677	Wes Vins
5/18/2006	Jackson Septic Mailing	390	Wes Vins
6/19/2006	Milton/Berlin Septic Mailings	904	Wes Vins
7/19/2006	Ellsworth/Smith Septic Mailings	1122	Wes Vins
8/12/2006	Wedgewood Block party	100	SWCD
8/16/2006	Austintown Septic Mailings	629	Wes Vins
8/26/2006	South Shore Block Party	100	SWCD
8/27/2006	Glacier Heights Block Party	50	SWCD
8/30/2006	Canfield Fair Enviroscape Demonstration	30	SWCD
8/31/2006	Canfield Fair Enviroscape Demonstration	30	SWCD
9/1/2006	Canfield Fair Enviroscape Demonstration	30	SWCD
9/2/2006	Canfield Fair Enviroscape Demonstration	30	SWCD
9/3/2006	Canfield Fair Enviroscape Demonstration	30	SWCD
9/4/2006	Canfield Fair Enviroscape Demonstration	30	SWCD
9/13/2006	Canfield Septic Mailing	704	Wes Vins
10/12/2006	Boardman Septic Mailing	221	Wes Vins
11/29/2006	Coitsville Septic Mailing	348	Wes Vins
12/13/2006	AWARE Meeting	32	SWCD
12/18/2006	Youngstown Community School	45	SWCD
1/18/2007	Landscaper Workshop	45	SWCD
1/25/2007	Phase II Meeting	8	SWCD
1/31/2007	AWARE Meeting	26	SWCD
2/27/2007	Erosion Sediment Control Workshop	48	SWCD
2/28/2007	AWARE Meeting	26	SWCD
3/6/2007	Erosion Sediment Control Workshop	33	SWCD
3/12/2007	Mahoning Matters Publications submitted	95500	SWCD
3/12/2007	Town Crier Publications submitted	50900	Daryl Neve
3/12/2007	Review Publications submitted	19000	John Kroner
3/12/2007	YSU News Radio submitted	50000	David Luscher
3/12/2007	WKBN News Radio submitted	2,000,000	John Nagy

In addition to these stats

There were a total of 28 Enviroscape Demonstrations between January 1, 2006 to March 12, 2007

There were a total of 4 Block Parties January 1, 2006 through March 12, 2007

Reporting period January 1, 2006 - March 12, 2007

**Attachment 1.2**  
**Mahoning County Outfall Database**  
**Example**

## Mahoning County Engineer's Illicit Discharge and Detection Elimination Manual Outfall Database

Community: Boardman

Outfall ID: 004

Receiving Watercourse: AndersonMacachee Run

Watershed: Mill Creek

Outfall Type: pipe

Pipe Material: CMP

Diameter: 24"

Owner: County

Observation Date: 1/4/2007

Litter Present? NO

Odor? Sewage

Color? Gray

Turbidity? Clear

Floatables? Foam / Bubbles

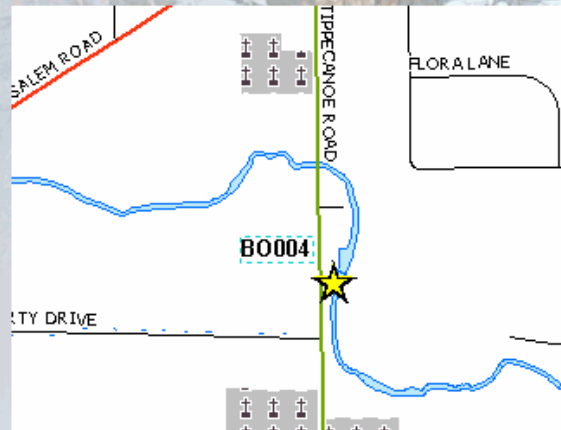
Priority: High Priority

Source? HSTS

Outfall Picture:



Outfall Location:



Comments:

**Attachment 1.3**  
**Mahoning County**  
**Erosion and Sediment Control Rules**

## **MAHONING COUNTY EROSION & SEDIMENT CONTROL RULES**

### **1. Purpose and Scope**

The Mahoning County Board of Commissioners adopts these Erosion and Sediment Control Rules, pursuant to Ohio Revised Code, Section 307.79, to establish technically-feasible and economically-reasonable standards to achieve a level of management and conservation practices in order to abate soil erosion and degradation of the waters of the State by soil sediment on land used or being developed for non-farm commercial, industrial, residential or other non-farm purposes, to establish criteria for determination of the acceptability of such management and conservation practices, and to implement Phase II of the storm water program of the National Pollutant Discharge Elimination System (NPDES) established in 40 CFR Part 122, and to promote the health, safety and well-being of the residents of Mahoning County. Specifically, the Rules are intended to protect:

- 1.1 Adjacent landowners from property loss due to sedimentation, erosion and flooding.
- 1.2 County and township ditches, culverts, storm sewers and storm water management facilities from loss of capacity due to siltation.
- 1.3 Water and habitat quality in streams and wetlands.
- 1.4 Land development from the inconsistent application of state and regional guidance.

These Rules apply to soil-disturbing activities on land within the unincorporated area of Mahoning County used or being developed for non-farm commercial, industrial, residential, or other non-farm purposes, including, but not limited to, individual or multiple lots, subdivisions, multi-family developments, commercial and industrial developments, recreational projects, general clearing and grading projects, underground utilities, highways, building activities on farms, redevelopment of urban areas and all other uses unless expressly excluded as follows:

- 1.5 Activities related to producing agricultural crops or silviculture operations or areas regulated by the Ohio Agricultural Sediment Pollution Abatement Rules.

1.6 Strip mine and surface mine operations.

1.7 An Erosion and Sediment Control Plan is not required before clearing, grading, excavating, filling or otherwise wholly or partially disturbing less than one contiguous acre of land owned by one person or operated as one development unit for the construction of non-farm buildings, structures, utilities, recreational areas or other similar non-farm uses; however, areas of less than one contiguous acre are not exempt from compliance with all other provisions of these Rules.

1.8 An Erosion and Sediment Control Plan is not required for a public highway, transportation, or drainage improvement or maintenance thereof undertaken by a government agency or political subdivision in accordance with a statement of its Standard Sediment Control Policies that is approved by the Mahoning County Board of Commissioners or the Chief of the ODNR Division of Soil and Water Conservation.

1.9 **Disclaimer of Liability**

Compliance with the provisions of this regulation shall not relieve any person from responsibility for damage to any person otherwise imposed by law. The provisions of this regulation are promulgated to promote the health, safety, and welfare of the public and are not designed for the benefit of any individual or for the benefit of any particular parcel of property.

1.10 **Conflicts, Severability, Nuisances and Responsibility**

(a) Where this regulation is in conflict with other provisions of law or ordinance, the most restrictive provisions shall prevail.

(b) If any clause, section, or provision of this regulation is declared invalid or unconstitutional by a court of competent jurisdiction, the validity of the remainder shall not be affected thereby.

(c) This regulation shall not be construed as authorizing any person to maintain a private or public nuisance on their property, and compliance with the provisions of this regulation shall not be a defense in any action to abate such a nuisance.

(d) Failure of the County to observe or recognize hazardous or unsightly conditions or to recommend corrective measures shall not relieve the site owner from the responsibility for the condition or damage resulting therefrom, and shall not result in the County its officers, employees, or agents being responsible for any condition or damage resulting therefrom.

2. **Terms Defined**

## 2.1 INTERPRETATION OF TERMS AND WORDS

- A. Words used in the present tense include the future tense and the singular include the plural, unless the context clearly indicates the contrary.
- B. The term "shall" is always mandatory and not discretionary. The word "may" is permissive. The term "should" is permissive but indicates strong suggestion.
- C. The word or term not interpreted or defined by this section shall be construed according to the rules of grammar and common usage so as to give these Rules their most reasonable application.

## 2.2 WORDS AND TERMS DEFINED

Abbreviated Erosion and Sediment Control Plan (Abbreviated ESC Plan): The written document that sets forth the plans and practices to be used to meet the requirements of this regulation.

Accelerated Soil Erosion: The increased loss of the land surface that occurs as a result of human activities.

Acre: A unit of measure equaling 43,560 square feet.

Administrator: The person or entity having the responsibility and duty of administering and ensuring compliance with these Rules. The Administrator shall be appointed by the Board of Mahoning County Commissioners.

Best Management Practices: Structural or nonstructural facilities or activities that control soil erosion and/or storm water runoff at a development site. Includes treatment requirements, operating and maintenance procedures, or other practices to control site runoff, leaks, or waste disposal.

Buffer Area: A designated transitional area around a stream or wetland left in a natural, usually vegetated, state so as to protect a stream or wetland from runoff pollution. Construction activities in this area shall be restricted or prohibited based on the sensitivity of the stream or wetland and the recommendation of the Administrator or its designee.

Channel: A natural or manmade bed or ditch, existing or excavated for the conveyance of water.

Common Plan of Development: A term used to define the entire scope of a development project, both on-site and off-site, regardless of ownership, including phases (future and existing), sublots, and parcels of development, associated easements, road and utility right of ways, and other land development or soil disturbances in support of the development project.

Critical Area: Any portion of an area subject to this Rule the disturbance of which would cause soil erosion and sediment run-off and damage to private properties, water courses, storm sewers or public lands due to topography, soil type, hydrology or proximity to a water course. These areas include, but are not limited to, riparian areas, wetlands and highly erodible soils.

Cut: An excavation that reduces an existing elevation, as in road or foundation construction.

Development Area: A contiguous area owned by one person or persons, or operated as one development unit, and used or being developed for non-farm commercial, industrial, residential or other institutional construction or alteration which changes the runoff characteristics of a parcel of land.

Development Project: An area of land, parcel or parcels, portions of parcels, and associated land disturbance that is being developed, redeveloped, or disturbed in support of development, for non-farm commercial, industrial, residential or other institutional construction or alteration which changes, either permanently or temporarily, the runoff characteristics or grade of the lands therein.

Disturbed Area: An area of land subject to erosion due to the removal of vegetative cover and/or soil moving activities, including filling.

Ditch: An open channel, either dug or natural, for the purpose of drainage or irrigation with intermittent flow.

Drainage: The removal of excess surface water or groundwater from land by surface or subsurface drains.

Drainage Surface Area: An area, measured in a horizontal plane, enclosed by a topographic divide from which surface runoff from precipitation normally drains by gravity into a stream above the specified point of measurement.

Drainage Improvement: An improvement as defined in O.R.C. 6131.01(C), and/or conservation works of improvement as defined in O.R.C. 1511 and 1515.

Drainage Way: A natural or manmade channel, ditch, or waterway that conveys surface water in a concentrated manner by gravity. See also watercourse, channel, stream.

Dumping: A grading, pushing, piling, throwing, unloading or placing.

Earth Material: The soil, sediment, rock, sand, gravel and organic material or residue associated with or attached to the soil.

Engineer: A Professional Engineer registered in the State of Ohio.

Erosion: The process by which the land surface is worn away by the action of wind, water, ice, gravity or any combination of those forces.

Erosion and Sediment Control: The control of soil material, both mineral and organic, during soil-disturbing activity to prevent its transport out of the disturbed area by means of wind, water, ice or gravity.

Erosion and Sediment Control Plan (ESC Plan): The written document meeting the requirements of Sections 3, 4 and 5 of these Rules which sets forth the plans and practices to be used to minimize soil erosion and prevent off-site disposal of soil sediment by containing sediment on-site or bypassing sediment-laden runoff through a sediment control measure during and after land development.

Farm: Land or water devoted to growing crops or cultivated in connection with raising or harvesting any agricultural or horticultural commodity, including nursery stock, and the raising, shearing, feeding, caring for, training, and management of livestock and poultry.

Final Stabilization: All soil disturbing activities at the site have been completed and a uniform perennial vegetative cover with a density of at least 80% cover for all disturbed areas has been established or equivalent stabilization measures, such as the use of mulches or geo-textiles, have been employed.

Grading: The excavating, filling, or stockpiling of soil material, or any combination thereof, including the land in its excavated or filled condition.

Grassed Waterway: A broad or shallow natural watercourse or constructed channel, covered with erosion-resistant grasses or similar vegetative cover, used to convey surface water.

Impervious: That which does not allow infiltration.

Landscape Architect: A Professional Landscape Architect registered in the State of Ohio.

Landslide: A rapid mass movement of soil and rock moving downhill under the influence of gravity.

Multi-family Development: Apartments, condominiums, duplexes or other similar buildings housing more than one family.

Natural Waterway: A waterway that is part of the natural topography, which usually maintains continuous or seasonal flow during the year and is characterized as being irregular in cross-section with a meandering course.

NPDES: National Pollutant Discharge Elimination System, a regulatory program in the Federal Clean Water Act that prohibits the discharge of pollutants into surface waters of the United States without a permit.

Parcel: Means a tract of land occupied or intended to be occupied by a use, building or group of buildings and their accessory uses and buildings as a unit, together with such open spaces and driveways as are provided and required. A parcel may contain more than one contiguous lot individually identified by a 'Permanent Parcel Number' assigned by the Mahoning County Auditor's Office.

Person: An individual, corporation, firm, trust, commission, board, public or private partnership, joint venture, agency, unincorporated association, municipal corporation, county or state agency, federal government or any combination thereof.

Phasing: Clearing a parcel of land in distinct sections, with the stabilization of each section before the clearing of the next.

Pre-Construction Meeting: A meeting between the Administrator or its designee and all principal parties, prior to the start of any soil-disturbing activities, at a site that requires an Erosion Sediment Control Plan.

Pre-Winter Stabilization Meeting: A meeting between the Administrator or its designee and all principal parties, prior to October 1, in order to plan winter erosion and sediment controls for a site that requires an Erosion Sediment Control Plan.

Rainwater and Land Development Manual: Ohio's standards for storm water management, land development, and urban stream protection developed by the Ohio Department of Natural Resources, the U.S. Department of Agriculture Natural Resource Conservation Service, and the Ohio Environmental Protection Agency. The most current edition of these standards shall be used with this regulation.

Sediment: The soils or other surface materials that can be transported or deposited from its site of origin by the action of wind, water, ice or gravity as a product of erosion.

Sedimentation: The deposit of sediment in water bodies.

Sediment Basin: A temporary barrier or other suitable retention structure built across an area of water flow to intercept runoff and allow transported sediment to settle and be retained prior to discharge into waters of the State.

Sediment Pollution: The degradation of waters of the State by sediment as a result of failure to apply management or conservation practices to abate wind or water soil erosion, specifically in conjunction with soil-disturbing activities on land used or being developed for commercial, industrial, residential or other non-farm purposes.

Sloughing/Slumping: A slip or downward movement of an extended layer of soil resulting from the undermining action of water or the soil-disturbing activity of man.

Soil Conservation: The use of the soil within the limits of its physical characteristics and protecting it from unalterable limitations of climate and topography.

Soil-Disturbing Activity: A clearing, grading, excavating, filling or other alteration of the earth's surface where natural or man-made ground cover is destroyed, which may result in, or contribute to, erosion and sediment pollution. Grubbing and stump removal that occurs during clearing or timber activities constitutes a soil disturbing activity.

Soil and Water Conservation District: An entity organized under Chapter 1515 of the Ohio Revised Code referring either to the Soil and Water Conservation District Board or its designated

employee(s), hereinafter referred to as the Mahoning SWCD.

Soil Loss: The soil moved from a given site by the forces of erosion, measured using “T.”

Stabilization: The installation of vegetative and/or structural measures to establish a soil cover in order to reduce soil erosion by storm water runoff, wind, ice, and gravity.

Storm Drain: A conduit, pipe or human-made structure, which serves to transport storm water runoff.

Storm Water Pollution Prevention Plan: (SWP3): The written document that sets forth the plans and practices to be used to meet the requirements of the NPDES permit.

Storm Water Runoff: The direct response of a watershed to precipitation, which includes the surface and subsurface runoff that enters a stream, ditch, storm sewer or other concentrated flow during and following the precipitation.

Stream: A body of water running or flowing on the earth's surface in which flow may be perennial, seasonally intermittent and/or ephemeral.

Subsoil: That portion of the soil below the topsoil or plow layer, beginning 6-12" below surface down to bedrock parent material.

T: The soil loss tolerance expressed in tons per acre per year as determined by the USDA Revised Universal Soil Loss Equation (RUSLE).

Temporary Soil Erosion and Sediment Control Measures: Interim control measures, which are installed or constructed to control soil erosion or sedimentation until permanent soil erosion control measures are established.

Topsoil: The upper layer of soil that is usually darker in color and richer in organic matter and nutrients than the subsoil.

Unstable Soils: A portion of land surface or area which is prone to slipping, sloughing, landslides or is identified by Natural Resource Conservation Service, USDA methodology as having low soil strength.

Watercourse: A definite channel with bed and banks within which concentrated water flows, either continuously or intermittently. All previously natural watercourses that are channelized, enclosed by pipe or captured are considered watercourses under these rules.

Water Resource: Any public or private body of water including lakes or ponds, and streams, gullies, swales, or ravines having banks, a defined bed, a permanent water mark and a definite direction of course, either continuously or intermittently flowing.

Watershed: The total drainage area contributing runoff to a single point.

Wetland: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas (40 CFR 232, as amended).

### **3. Regulated Activities.**

No person shall cause or allow soil-disturbing activities, land clearing, grading, excavating or filling within the scope of these Rules without full compliance with the requirements set forth in these Rules.

- 3.1 When a proposed soil-disturbing activity on land used or being developed, either wholly or partially, for non-farm residential, commercial, industrial, or other non-farm purposes consisting of one or more contiguous acres of land owned by one person or operated as one development unit for the construction of non-farm buildings, structures, utilities, recreational areas or other limited non-farm uses, the owner of said land shall prepare and file with the Administrator or its designee an Erosion and Sediment Control Plan (ESC Plan). Areas of less than one contiguous acre shall not be exempt from compliance with all other provisions of these Rules.
- 3.2 When a proposed soil-disturbing activity on land used or being developed, either wholly or partially, for non-farm residential, commercial, industrial, or other non-farm purposes expressly stated in the most current Ohio EPA Construction General Permit (CGP), consisting of less than one contiguous acre of land owned by one person or operated as one development unit for the construction of non-farm buildings, structures, utilities, recreational areas or other limited non-farm use, which is part of a larger common plan of development, the owner of said land shall prepare and file with the Administrator or its designee an Abbreviated ESC Plan, which shall consist of items listed in Section 4.11 of this document. A copy of the Ohio EPA Notice of Intent and Ohio EPA Director's Authorization Letter for the NPDES Permit coverage shall be provided.
- 3.3 When a residential dwelling unit on an individual lot is proposed, which is not part of a larger common plan of development and less than one acre, the owner of said land shall not be required to prepare and file an ESC Plan; however, said owner shall comply with all other provisions of these Rules.
- 3.4 The submitted ESC Plan must be approved by the Administrator of these Rules or its designee prior to the start of any soil-disturbing activity. The owner of said land shall notify the Administrator or its designee no less than two (2) working days before the start of soil-disturbing activity. The Administrator or its designee shall also be notified by the owner no later than two (2) working days after project completion.
- 3.5 The ESC Plan shall be submitted to the Administrator or its designee for review no less than thirty (30) working days prior to any soil-disturbing activity at the proposed site.
- 3.6 The ESC Plan shall contain narrative and drawings that explain practices to be used to prevent soil erosion and off-site discharge of soil sediment during and after land

development. (See Section 5 for plan requirements and review schedules.)

- 3.7 Erosion and sediment control practices used to satisfy the performance criteria of these Rules shall meet the specifications provided in the current edition of *Rainwater & Land Development Manual*, Ohio's Standards for Storm Water Management and Land Development, and Urban Stream Protection, published by the Ohio Department of Natural Resources and provisions of the Mahoning County Floodplain Regulations (See Section 4 for performance standards and requirements).
- 3.8 Approvals issued in accordance with this regulation do not relieve the applicant of responsibility for obtaining all other necessary permits and/or approvals from the Ohio EPA, the US Army Corps of Engineers, and other federal, state, county and/or township agencies. If requirements vary, the most restrictive requirement shall prevail. These permits may include, but are not limited to, those listed below. All submittals required showing proof of compliance with these state and federal regulations shall be submitted with ESC Plans or Abbreviated ESC Plans.

(a) Ohio EPA NPDES Permits authorizing storm water discharges associated with construction activity or the most current version thereof: Proof of compliance with these requirements shall be the applicant's Notice of Intent (NOI) from Ohio EPA, a copy of the Ohio EPA Director's Authorization Letter for the NPDES Permit, or a letter from the site owner certifying and explaining why the NPDES Permit is not applicable.

(b) Section 401 of the Clean Water Act: Proof of compliance shall be a copy of the Ohio EPA Water Quality Certification application tracking number, public notice, project approval, or a letter from the site owner certifying that a qualified professional has surveyed the site and determined that Section 401 of the Clean Water Act is not applicable. Wetlands, and other waters of the United States, shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.

(c) Ohio EPA Isolated Wetland Permit: Proof of compliance shall be a copy of Ohio EPA's Isolated Wetland Permit application tracking number, public notice, project approval, or a letter from the site owner certifying that a qualified professional has surveyed the site and determined that Ohio EPA's Isolated Wetlands Permit is not applicable. Isolated wetlands shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.

(d) Section 404 of the Clean Water Act: Proof of compliance shall be a copy of the U.S. Army Corps of Engineers Individual Permit application, public notice, or project approval, if an Individual Permit is required for the development project. If an Individual Permit is not required, the site owner shall submit proof of compliance with the U.S. Army Corps of Engineer's Nationwide Permit Program. This shall include one of the following:

- (1) A letter from the site owner certifying that a qualified professional has surveyed the site and determined that Section 404 of the Clean Water Act is not applicable.
- (2) A site plan showing that any proposed fill of waters of the United States conforms to the general and special conditions specified in the applicable Nationwide Permit.

Wetlands, and other waters of the United States, shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.

(e) Ohio Dam Safety Law: Proof of compliance shall be a copy of the ODNR Division of Water permit application tracking number, a copy of the project approval letter from the ODNR Division of Water, or a letter from the site owner certifying and explaining why the Ohio Dam Safety Law is not applicable.

- 3.9 The ESC Plan shall be certified by a professional engineer registered in the State of Ohio, or certified professional erosion and sediment control specialist.
- 3.10 The owner of said land and the developer, engineer and contractor of the project, and other principal parties, shall meet with the Administrator or its designee for a Pre-Construction Meeting no less than seven (7) days prior to soil-disturbing activity at the site in order to ensure that erosion and sediment control devices are properly installed, limits of disturbance and buffer areas are properly delineated and construction personnel are aware of such devices and areas. Pre-Construction Meetings for Abbreviated ESC Plans may be waived at the discretion of the Administrator or its designee.
- 3.11 The approved ESC Plan shall be kept at the development site and made available to contractors, site managers, inspectors and the Administrator of these regulations or its designee.
- 3.12 The project engineer shall perform first inspection of erosion and sediment control devices to certify that the “as built” condition complies with the approved plan no less than two (2) working days prior to the start of the project. An inspection report shall be produced and kept at the development site and be made available to the Administrator or its designee within seven (7) working days from the date of inspection.
- 3.13 All project activity shall be subject to monitoring. A record of site inspections and compliance and non-compliance shall be maintained by the Administrator or its designee.
- 3.14 If site is, or planned, to remain active through the winter months, a Pre-Winter Stabilization Meeting shall be held by the owner of said land and the developer, engineer and contractor of the project and the Administrator or its designee prior to October 1, in order to plan and approve winter erosion and sediment controls as defined in the most current edition of *Rainwater and Land Development Manual*, Ohio’s Standards for Storm Water Management and Land Development and Urban Stream Protection, published by the Ohio Department of Natural Resources.
- 3.15 Upon completion of all construction and final stabilization of the entire construction site, the owner of said land shall contact the Administrator or its designee through written notification that construction is complete and final stabilization has been achieved.

#### **4. Performance Standards**

All properties adjacent to the site of soil-disturbing activity shall be protected from soil erosion and sediment run-off and damage, including, but not limited to, private properties, natural and artificial waterways, wetlands, storm sewers and public lands.

Construction site erosion and sediment control practices used to satisfy this requirement shall conform, as a minimum, to State of Ohio standards as set forth in the current edition of the

*Rainwater and Land Development Manual* and as defined by the Ohio Department of Natural Resources Division of Soil and Water Conservation and Natural Resource Conservation Service (NRCS) and shall conform to the current Ohio Environmental Protection Agency, Ohio Revised Code Chapter 6111, requirements. The ESC Plan is intended to be the same as the erosion control portion of the SWP3 required in the Ohio EPA's Construction General Permit. All SWP3 requirements listed in the Ohio EPA CGP must also be met.

ESC Plan approvals issued in accordance with these Rules do not relieve the owner of responsibility for obtaining all other necessary permits and/or approvals from federal, state and/or county agencies. If requirements vary, the most stringent requirement shall be followed.

Erosion and sediment control practices at the site and as identified in the ESC Plan, shall comply with the following:

The ESC Plan must contain a description of the controls appropriate for each construction operation and the applicant must implement such controls. The ESC Plan must clearly describe the following for each major construction activity: the appropriate control measures; the general sequence during the construction process under which the measures will be implemented; and the contractor responsible for implementation (e.g., contractor A will clear land and install perimeter controls and contractor B will maintain perimeter controls until final stabilization).

The controls shall include the following minimum components:

- 4.1 NON-STRUCTURAL PRESERVATION MEASURES: The ESC Plan must make use of practices that preserve the existing natural condition to the maximum extent practicable. Such practices may include preserving riparian areas, preserving existing vegetation and vegetative buffer strips, phasing of construction operations in order to minimize the amount of disturbed land at any one time, and designation of tree preservation areas or other protective clearing or grubbing practices.
- 4.2 EROSION CONTROL PRACTICES: The ESC Plan must make use of erosion controls that are capable of providing cover over disturbed soils. A description of control practices designed to re-stabilize disturbed areas after grading or construction shall be included in the ESC Plan. The ESC Plan must provide specifications for stabilization of all disturbed areas of the site and provide guidance as to which method of stabilization will be employed for any time of the year. Such practices may include temporary seeding, permanent seeding, mulching, matting, sod stabilization, vegetative buffer strips, phasing of construction operations, the use of construction entrances, and the use of alternative ground cover.

Erosion control practices must meet the following requirements:

- (a) Stabilization. Disturbed areas must be stabilized as specified in Tables 1 and 2.

**Table 1: Permanent Stabilization**

Area requiring permanent stabilization	Time frame to apply erosion controls
Any area that will lie dormant for one year or more.	Within 7 days of the most recent disturbance.
Any area within 50 feet of a stream or a riparian setback area and at final grade.	Within 2 days of reaching final grade.
Any area at final grade.	Within 7 days of reaching final grade within that area.

**Table 2: Temporary Stabilization**

Area requiring temporary stabilization	Time frame to apply erosion controls
Any disturbed area within 50 feet of a stream or a riparian setback area and not at final grade.	Within 2 days of the most recent disturbance if that area will remain idle for more than 21 days.
For all construction activities, any disturbed area, including soil stockpiles that will be dormant for more than 21 days but less than one year.	Within 7 days of the most recent disturbance within the area.
Disturbed areas that will be idle over winter.	Prior to November 1.
<b>Note:</b> Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques must be employed. These techniques may include mulching or erosion matting.	

- (b) Permanent stabilization of conveyance channels. Applicants shall undertake special measures to stabilize channels and outfalls and prevent erosive flows. Measures may include seeding, dormant seeding, mulching, erosion control, matting, sodding, riprap, natural channel design with bioengineering techniques or rock check dams, all as defined in the current edition of the *Rainwater and Land Development Manual* or the NRCS Field Office Technical Guide available at [www.nrcs.usda.gov/technical/efotg/](http://www.nrcs.usda.gov/technical/efotg/).

**4.3 RUNOFF CONTROL PRACTICES:** The ESC Plan shall incorporate measures that control the flow of runoff from disturbed areas so as to prevent erosion. Such practices may include rock check dams, pipe slope drains, diversions to direct flow away from exposed soils and protective grading practices. These practices shall divert runoff away from disturbed areas and steep slopes where practicable.

**4.4 SEDIMENT CONTROL PRACTICES:** The ESC Plan shall include a description of, and detailed drawings for, all structural practices that shall store runoff, allowing sediments to settle and/or divert flows away from exposed soils or otherwise limit runoff from exposed areas. Structural practices shall be used to control erosion and trap sediment from a site remaining disturbed for more than 14 days. Such practices may include, but are not limited to, sediment-settling ponds, silt fences, storm drain inlet protection, and earth diversion dikes or channels which direct runoff to a sediment-settling pond. All sediment control practices must be capable of ponding runoff in order to be considered functional. Earth diversion dikes or channels alone are not considered a sediment control practice unless used in conjunction with a sediment-settling pond.

Sediment control practices must meet the following requirements:

(a) Timing. Sediment control structures shall be functional throughout the course of soil-disturbing activity. Sediment basins and perimeter sediment barriers shall be implemented prior to grading and within seven (7) days from the start of grubbing. They shall continue to function until the upslope development area is restabilized. As construction progresses and the topography is altered, appropriate controls must be constructed or existing controls altered to address the changing drainage patterns.

(b) Sediment-settling ponds. Concentrated storm water runoff and runoff from drainage areas that exceed the design capacity of silt fence or inlet protection, as determined in Table 3, shall pass through a sediment-settling pond or equivalent best management practice (BMP) upon approval from the Administrator or its designee.

The sediment-settling pond shall be sized to provide at least 134 cubic yards of storage per acre of total contributing drainage area. When determining the total contributing drainage area, off-site areas and areas which remain undisturbed by construction activity must be included unless runoff from these areas is diverted away from the sediment-settling pond and is not co-mingled with sediment-laden runoff. The depth of the sediment-settling pond must be less than or equal to five (5) feet. The configuration between the inlets and the outlet of the basin must provide at least two units of length for each one unit of width ( $> 2:1$  length:width ratio). Sediment must be removed from the sediment-settling pond when the design capacity has been reduced by 40 percent. This limit is typically reached when sediment occupies one-half of the basin depth. When designing sediment-settling ponds, the applicant must consider public safety, especially as it relates to children, as a design factor for the sediment basin and alternative sediment controls must be used where site limitations would preclude a safe design. The use of a combination of sediment and erosion control measures in order to achieve maximum pollutant removal is encouraged.

(c) Silt fence and diversions. Sheet flow runoff from denuded areas shall be intercepted by silt fence or diversions to protect adjacent properties, water resources, and wetlands from sediment transported via sheet flow. Where intended to provide sediment control, silt fence shall be placed on a level contour and shall be capable of temporarily ponding runoff. The relationship between the maximum drainage area to silt fence for a particular slope range is shown in Table 3. Storm water diversion practices shall be used to keep runoff away from disturbed areas and steep slopes. Such devices, which include swales, dikes or berms, may receive storm water runoff from areas up to 10 acres.

**Table 3: Maximum Drainage Area to Silt Fence**

Maximum Drainage Area (acres) to 100 linear feet of silt fence	Range of Slope for a drainage area (%)
0.5	$< 2\%$
0.25	$> 2\%$ but $< 20\%$
0.125	$> 20\%$ but $< 50\%$

(d) Inlet protection. Erosion and sediment control practices, such as boxed inlet protection, shall be installed to minimize sediment-laden water entering active storm drain systems. Straw or hay bales are not acceptable forms of inlet protection.

(e) Off-site tracking of sediment and dust control. Best management practices (BMPs) must be implemented to ensure sediment is not tracked off-site and that dust is controlled. These BMPs must include, but are not limited to, the following:

1. Construction entrances shall be built and shall serve as the only permitted points of ingress and egress to the development area. These entrances shall be built of a stabilized pad of aggregate stone or recycled concrete or cement sized greater than 2" in diameter, placed over a geotextile fabric, and constructed in conformance with specifications in the current edition of the *Rainwater and Land Development Manual*.

2. Streets directly adjacent to construction entrances and receiving traffic from the development area shall be cleaned daily to remove sediment tracked off-site. If applicable, the catch basins on these streets nearest to the construction entrances shall also be cleaned weekly.

Based on site conditions the Administrator or its designee may require additional BMPs to control off-site tracking and dust. These additional BMPs may include:

3. Silt fence or construction fence installed around the perimeter of the development area to ensure that all vehicle traffic adheres to designated construction entrances.

4. Designated wheel-washing areas. Wash water from these areas must be directed to a designated sediment trap, the sediment-settling pond, or to a sump pump for dewatering in conformance with Section 4.7 of this regulation.

5. Applicants shall take all necessary measures to comply with applicable regulations regarding fugitive dust emissions, including obtaining necessary permits for such emissions. The Administrator or its designee may require dust controls including the use of water trucks to wet disturbed areas, tarping stockpiles, temporary stabilization of disturbed areas, chemical amendments to the soil and regulation of the speed of vehicles on the site.

(f) Stream protection. Construction vehicles shall avoid water resources and wetlands. If the applicant is requesting to disturb areas that contain a watercourse or wetland, the Mahoning County Model Ordinance for the Establishment of Riparian Setbacks standards shall apply.

The following conditions shall be addressed in the ESC Plan:

1. All BMPs and stream crossings shall be designed as specified in the current edition of the *Rainwater and Land Development Manual*.

2. Structural practices shall be designated and implemented on site to protect water resources or wetlands from the impacts of sediment runoff.

3. No structural sediment controls (e.g., the installation of silt fence or a sediment settling pond in-stream) shall be used in a water resource or wetland.

4. Where stream crossings for roads or utilities are necessary and permitted, the project shall be designed such that the number of stream crossings and the width of the disturbance are minimized.

5. Temporary stream crossings shall be constructed if water resources or wetlands will be crossed by construction vehicles during construction.

6. Construction of bridges, culverts, or sediment control structures shall not place soil, debris, or other particulate material into or close to the water resources or wetlands in such a manner that it may slough, slip, or erode.

(g) Modifying controls. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the applicant shall replace or modify the control for site conditions.

4.5 NON-SEDIMENT POLLUTANT CONTROLS: No solid or liquid waste, including building materials, shall be discharged in storm water runoff. The applicant must implement site BMPs to prevent toxic materials, hazardous materials, or other debris from entering water resources or wetlands. These practices shall include, but are not limited to, the following:

(a) Waste Materials. A covered dumpster shall be made available for the proper disposal of garbage, plaster, drywall, grout, gypsum, and other waste materials.

(b) Concrete Truck Wash Out. The washing of concrete material into a street, catch basin, or other public facility or natural resource is prohibited. A designated area for concrete washout shall be made available.

(c) Fuel/Liquid Tank Storage. All fuel/liquid tanks and drums shall be stored in a marked storage area. A dike shall be constructed around this storage area with a minimum capacity equal to 110% of the volume of all containers in the storage area unless secondary containment is provided by the product manufacturer.

(d) Toxic or Hazardous Waste Disposal. Any toxic or hazardous waste shall be disposed of properly.

(e) Contaminated Soils Disposal and Runoff. Contaminated soils from redevelopment sites shall be disposed of properly. Runoff from contaminated soils shall not be discharged from the site. Proper permits shall be obtained for development projects on solid waste landfill sites or redevelopment sites.

4.6 COMPLIANCE WITH OTHER REQUIREMENTS: The ESC Plan shall be consistent with applicable State and/or local waste disposal, sanitary sewer or septic system regulations, including provisions prohibiting waste disposal by open burning and shall provide for the proper disposal of contaminated soils located within the development area.

4.7 TRENCH AND GROUND WATER CONTROL: There shall be no sediment-

laden or turbid discharges to water resources or wetlands resulting from dewatering activities. If trench or ground water contains sediment, it must pass through a sediment-settling pond or other equally-effective sediment control device, prior to being discharged from the construction site. Alternatively, sediment may be removed by settling in place or by dewatering into a sump pit, filter bag or comparable practice. Ground water dewatering which does not contain sediment or other pollutants is not required to be treated prior to discharge. However, care must be taken when discharging ground water to ensure that it does not become pollutant-laden by traversing over disturbed soils or other pollutant sources.

**4.8 INTERNAL INSPECTIONS:** All erosion and sediment controls on the site shall be inspected at least once every seven (7) calendar days and within 24 hours after any storm event greater than one-half (.5) inch of rain per 24-hour period. The applicant shall assign qualified inspection personnel to conduct these inspections to ensure that the control practices are functional and to evaluate whether the ESC is adequate, or whether additional control measures are required. Qualified inspection personnel are individuals with knowledge and experience in the installation and maintenance of sediment and erosion controls.

These inspections shall meet the following requirements:

(a) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system.

(b) Erosion and sediment control measures identified in the ESC Plan shall be observed to ensure that they are operating correctly. The applicant shall utilize an inspection form to be provided to the Administrator or its designee or an alternate form acceptable to the Administrator or its designee upon request.

(c) Discharge locations shall be inspected to determine whether erosion and sediment control measures are effective in preventing significant impacts to the receiving water resource or wetlands.

(d) Locations where vehicles enter or exit the site shall be inspected for evidence of off-site vehicle tracking.

(e) The applicant shall maintain for three (3) years following final stabilization the results of these inspections, the names and qualifications of personnel making the inspections, the dates of inspections, major observations relating to the implementation of the ESC Plan, a certification as to whether the facility is in compliance with the ESC Plan, and information on any incidents of non-compliance determined by these inspections.

**4.9 MAINTENANCE:** The ESC Plan shall be designed to minimize maintenance requirements. All control practices shall be maintained and repaired as needed to ensure continued performance of their intended function until final stabilization. All sediment control practices must be maintained in a functional condition until all upslope areas they control reach final stabilization. The applicant shall provide a description of maintenance procedures needed to ensure the continued performance of control practices and shall ensure a responsible party to conduct this maintenance.

When inspections reveal the need for repair, replacement, or installation of erosion and sediment control BMPs, the following procedures shall be followed:

(a) When practices require repair or maintenance. If an internal inspection reveals that a control practice is in need of repair or maintenance, with the exception of a sediment-settling pond, it must be repaired or maintained within three (3) days of the inspection. Sediment-settling ponds must be repaired or maintained within ten (10) days of the inspection.

(b) When practices fail to provide their intended function. If an internal inspection reveals that a control practice fails to perform its intended function as detailed in the ESC Plan and that another, more appropriate control practice is required, the ESC Plan must be amended and the new control practice must be installed within ten (10) days of the inspection.

(c) When practices depicted on the ESC Plan are not installed. If an internal inspection reveals that a control practice has not been implemented in accordance with the schedule, the control practice must be implemented within ten (10) days from the date of the inspection. If the internal inspection reveals that the planned control practice is not needed, the record must contain a statement of explanation as to why the control practice is not needed.

4.10 FINAL STABILIZATION: Final stabilization shall be determined by the Administrator or its designee.

#### 4.11 ABBREVIATED EROSION AND SEDIMENT CONTROL PLAN:

(a) In order to control sediment pollution of water resources and wetlands, the applicant shall submit an Abbreviated ESC Plan in accordance with the requirements of this regulation.

(b) The Abbreviated ESC Plan shall be certified by a professional engineer, a registered surveyor, certified professional erosion and sediment control specialist, or a registered landscape architect.

(c) The Abbreviated ESC Plan shall include a minimum of the following BMPs. The Administrator or its designee may require other BMPs as site conditions warrant.

1. Construction Entrances: Construction entrances shall be built and shall serve as the only permitted points of ingress and egress to the development area. These entrances shall be built of a stabilized pad of aggregate stone or recycled concrete sized greater than 2" in diameter, placed over a geotextile fabric, and constructed in conformance with specifications in the current edition of the *Rainwater and Land Development Manual*.

2. Concrete Truck Wash Out: The washing of concrete material into a street, catch basin, or other public facility or natural resource is prohibited. A designated area for concrete washout shall be made available.

3. Street Sweeping: Streets directly adjacent to construction entrances and receiving traffic, from the development area, shall be cleaned daily to remove sediment tracked off-site. If applicable, the catch basins on these streets nearest to the construction entrances shall be cleaned weekly.

4. Stabilization: The development area shall be stabilized as detailed in Table 4.

**Table 4: Stabilization**

Area requiring stabilization	Time frame to apply erosion controls
Any disturbed area within 50 feet of a stream or a riparian setback area and not at final grade.	Within 2 days of the most recent disturbance if that area will remain idle for more than 21 days
For all construction activities, any disturbed area, including soil stockpiles, that will be dormant for more than 21 days but less than one year.	Within 7 days of the most recent disturbance within the area
Disturbed areas that will be idle over winter	Prior to November 1.
<b>Note:</b> Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques must be employed. These techniques may include mulching or erosion matting.	

5. Inlet Protection: Erosion and sediment control practices, such as boxed inlet protection, shall be installed to minimize sediment-laden water entering active storm drain systems. Straw or hay bales are not acceptable forms of inlet protection.

6. Internal Inspection and Maintenance: All controls on the development area shall be inspected at least once every seven (7) calendar days and within 24 hours after any storm event greater than one-half (.5) inch of rain per 24-hour period. Maintenance shall occur as detailed below:

A. When practices require repair or maintenance. If the internal inspection reveals that a control practice is in need of repair or maintenance, with the exception of a sediment-settling pond, it must be repaired or maintained within three (3) days of the inspection. Sediment-settling ponds must be repaired or maintained within ten (10) days of the inspection.

B. When practices fail to provide their intended function. If the internal inspection reveals that a control practice fails to perform its intended function and that another, more appropriate control practice is required, the Abbreviated ESC Plan must be amended and the new control practice must be installed within ten (10) days of the inspection.

C. When practices depicted on the Abbreviated ESC Plan are not installed. If the internal inspection reveals that a control practice has not been implemented in accordance with the schedule, the control practice must be implemented within ten (10) days from the date of the inspection. If the inspection reveals that the planned control practice is not needed, the record must contain a statement of explanation as to why the control practice is not needed.

7. Final Stabilization: Final stabilization shall be determined by the Administrator or its designee.

## **5. Application Procedures for ESC Plan**

In the case of subdivisions, the ESC Plan for development projects shall be submitted to the Administrator or its designee following the approval of the preliminary plans and prior to the approval of improvement plans by the Mahoning County Planning Commission. In the case of other construction projects, the ESC Plan shall be submitted at least 30 working days prior to any soil-disturbing activity for general clearing projects.

The Administrator or its designee shall review the ESC Plan and approve, or return for revision with comments and recommendations for revision, within 21 working days after receipt of said plan. A plan rejected because of deficiencies shall receive a narrative report stating specific problems and the procedure for filing a revised plan. At the time of receipt of a revised plan, another 21 day review period shall commence.

*An Application for Approval under the Mahoning County Erosion and Sediment Control Rules* must be submitted with the ESC Plan.

Approved plans shall remain valid for two years from the date of approval. A copy of the approved plan and its review report shall be forwarded by the Administrator or its designee to the County Engineer and Mahoning County Soil & Water Conservation District.

A plan is considered complete when it contains two sets of the following:

**5.1 Site construction plans** intended for contractor's bid.

**5.2 Contact information** for the owner of the land, the developer and project engineer; project engineer's certification; project name; and, project vicinity map.

**5.3 Permit Verification**

(a) Jurisdictional Wetlands: In areas where jurisdictional wetlands, as defined by an on-site delineation verified by the United States Army Corps of Engineers will be affected, a copy of the wetland delineation report shall be submitted with the ESC Plan. If an Individual Permit is required, a copy of that Permit, showing project approval and any restrictions that apply to site activities, shall also be submitted. If an Individual Permit is not required for the proposed project, the site owner shall submit proof of compliance with the Nationwide Permit Program as detailed under Section 3.8. If an Ohio EPA Section 401 Water Quality Certification and/or an Ohio EPA Isolated Wetland Permit is required the site owner shall submit proof of compliance with the Ohio EPA Water Quality Certification and/or Isolated Wetland Permit program as detailed in Section 3.8.

(b) An Ohio Environmental Protection Agency (OEPA) National Pollutant Discharge Elimination System (NPDES) permit with a copy of the Ohio EPA Director's Authorization Letter and Notice of Intent shall be submitted with the ESC Plan.

**5.4 Project Description:** A brief description of the project and types of soil-disturbing

activities. Note specifically items not self-evident from the plan drawings. The project description shall list total project acreage, north arrow and adjacent property boundaries.

(1) Site description: The ESC Plan shall provide:

- A. A description of the nature and type of the construction activity (e.g. residential, shopping mall, highway, etc.).
- B. Total area of the site and the area of the site that is expected to be disturbed (i.e., grubbing, clearing, excavation, filling or grading, including off-site borrow areas).
- C. Existing data describing the soil and, if available, the quality of any known pollutant discharge from the site such as that which may result from previous contamination caused by prior land uses.
- D. A description of prior land uses at the site.
- E. An implementation schedule which describes the sequence of major soil-disturbing operations (i.e., grubbing, excavating, grading, utilities and infrastructure installation) and the implementation of erosion and sediment controls to be employed during each operation of the sequence.
- F. The location and name of the immediate receiving stream or surface water(s) and the first subsequent receiving water(s).
- G. The aerial (plan view) extent and description of wetlands or other special aquatic sites at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project.
- H. For subdivided developments where the ESC Plan does not call for a centralized sediment control capable of controlling multiple individual lots, a detail drawing of a typical individual lot showing standard individual lot erosion and sediment control practices.
- I. Site map showing:
  - i. Limits of soil-disturbing activity of the site, including off site spoil and borrow areas.
  - ii. Soils types should be depicted for all areas of the site, including locations of unstable or highly erodible soils.
  - iii. Existing and proposed one-foot (1') contours. This must include a delineation of drainage watersheds expected during and after major grading activities as well as the size of each drainage watershed in acres.
  - iv. Surface water locations including springs, wetlands, streams, lakes, water wells, etc., on or within 200 feet of the site, including the boundaries of wetlands or stream channels and first subsequent named receiving water(s) the applicant intends to fill or relocate for which the applicant is seeking approval from the Army Corps of Engineers and/or Ohio EPA.

v. Existing and planned locations of buildings, roads, parking facilities, and utilities.

vi. The location of all erosion and sediment control practices, including the location of areas likely to require temporary stabilization during the course of site development.

vii. Sediment ponds, including their sediment settling volume and contributing drainage area.

viii. Areas designated for the storage or disposal of solid, sanitary and toxic wastes, including dumpster areas, areas designated for concrete truck washout, and vehicle fueling.

ix. The location of designated stoned construction entrances where the vehicles will ingress and egress the construction site.

x. The location of any in-stream activities including stream crossings.

(2) A soils engineering report. The Administrator or its designee may require the ESC Plan to include a Soils Engineering Report based upon the determination that the conditions of the soils are unknown or unclear to the extent that additional information is required to protect against erosion or other hazards. This report shall be based on adequate and necessary test borings, and shall contain all the information listed below. Recommendations included in the report and approved by the Administrator or its designee shall be incorporated in the grading plans and/or other specifications for site development.

A. Data regarding the nature, distribution, strength, and erodibility of existing soils.

B. If applicable, data regarding the nature, distribution, strength, and erodibility of the soil to be placed on the site.

C. Conclusions and recommendations for grading procedures.

D. Conclusions and recommended designs for interim soil stabilization devices and measures, and for permanent soil stabilization after construction are completed.

E. Design criteria for corrective measures when necessary.

F. Opinions and recommendations covering the stability of the site.

**5.5 Existing site conditions** shown with maximum scale of 1"=200' and 2' contour intervals; locations and names of soil type boundaries, vegetation, ditches, springs, streams, lakes, wetlands, woods, agricultural fields; location of downstream lakes and wetlands within 1000' of project; and, existing drainage patterns including direction of flow and

watershed acreage.

- 5.6 Grading plan** showing types of soils and boundaries; limits of disturbance; areas of excavation and fill; final contours; and, proposed drainage pattern including storm sewer inlets and permanent storm water basins. Basin detail shall be drawn to scale and show volumes and size of contributing drainage area.
- 5.7 Erosion and Sediment Control plan** showing location, type and construction detail for perimeter controls; sediment settling devices; limits of disturbance; buffers for streams, wetlands, ponds and drainages; seeding mixtures and rates; and, type and quantity of mulching; application of water or fertilizer. ESC plans shall also provide a detailed construction sequence. Updates and/or corrections to schedules and/or sequencing shall be clearly marked or listed on approved plans, which shall be located at the site.
- 5.8 Storm Water Control Methods** adequate to prevent pollution of public waters by soil sediment from accelerated storm water runoff from development areas.
- 5.9 Contractor's Construction Sequence** that estimates the time frame required for the following:
- (a) Pre-Construction meeting.
  - (b) Initial clearing and grubbing to gain access and installation of perimeter controls within seven (7) days of clearing and grubbing.
  - (c) Clearing and grubbing followed by excavation of sediment traps and basins and temporary soil stabilization for these sediment settling devices within seven (7) days of excavation.
  - (d) Project engineer's initial inspection of erosion and sediment controls for "as-built" certification.
  - (e) Maintenance inspection schedule and party responsible for inspection and repair of erosion and sediment control devices.
  - (f) Pre-Winter Stabilization meeting if project is to be through the winter.
  - (g) Final grading and permanent soil stabilization within 7 days of finishing final grade.
  - (h) Removal of temporary sediment control devices.
- 5.10 Review and Inspection Fee** when required, shall be submitted with the Erosion and Sediment Control Plan. ESC Plans shall not be reviewed until the fee has been paid. The fee is based on project size and paid by the owner or developer directly to the Administrator or its designee.

## **6. Monitoring for Compliance**

Following the initial inspection of erosion and sediment control devices by the project engineer, regular inspections will be performed by the Administrator or its designee for compliance with these Rules. If it appears that a violation of any of these Rules has occurred, the owner and developer will be notified of deficiencies or noncompliance in writing by certified mail, return receipt requested; by ordinary U.S. mail at the last known address of the owner and/or developer; or by posting a Notice of Violation at the site of the alleged violation; or a combination of the foregoing. If within 14 days after receipt of the letter, the owner or developer has not rectified the deficiency or received approval of plans for its correction, the deficiency or noncompliance shall be reported to the Board of Mahoning County Commissioners for consideration of a "finding of violation."

If the Board of Mahoning County Commissioners determines that a violation exists and requests the Prosecuting Attorney of Mahoning County in writing, the Prosecuting Attorney shall seek an injunction or other appropriate relief to abate excessive erosion or sedimentation and secure compliance with these Rules. In granting relief, a court may order the construction of sediment control improvements or implementation of other control measures.

The Administrator or its designee shall have the authority to make immediate on-site adjustments to the ESC Plan in order to achieve compliance with these Rules.

A final inspection will be made to determine if the criteria of these Rules have been satisfied and a report will be presented to the Board of Mahoning County Commissioners on the site's compliance status.

The Administrator or its designee will monitor soil-disturbing activities for non-farm residential, commercial, industrial, or other non-farm purposes on land of less than one contiguous acre to ensure compliance required by these Rules.

The Administrator or its designee shall notify the U.S. Army Corps of Engineers when there is a violation on a development project covered by an Individual or Nationwide Permit. The Administrator or its designee shall notify the Ohio Environmental Protection Agency when there is a violation on a development project covered by a Section 401 Water Quality Certification and/or Isolated Wetland Permit.

The Administrator or its designee shall not review or approve erosion and sediment control plans, of any type, for applicants that have an existing development project or site(s) that is not in compliance with its approved erosion and sediment control plan, or a project site(s) that is otherwise not in compliance with the Mahoning County Erosion and Sediment Control Rules.

The Administrator or its designee shall not review or approve erosion and sediment control plans for sublots or other areas within existing development projects that are not in compliance with its approved erosion and sediment control plan or otherwise not in compliance with the Mahoning County Erosion and Sediment Control Rules. Such development projects include but not limited to, subdivisions or other common plans of development

The County of Mahoning reserves the right to withhold relevant inspections and/or other approvals from its departments and/or agencies for development projects or activities in support of development projects that are not in compliance with these Rules.

## **7. Variances to Rules**

The Mahoning County Board of Commissioners, or its duly authorized representative, may grant a variance to these Rules if all of the following are found to exist:

- (a) There are exceptional or extraordinary circumstances or conditions applying to the land.
- (b) Literal enforcement of the Rules would cause undue hardship or practical difficulties.
- (c) The exceptional or extraordinary circumstances or conditions and the undue hardship or practical difficulties were not the result of any prior actions of the owner of the land.
- (d) The variance is necessary for the preservation and enjoyment of substantial property rights of the owner of the land.
- (e) The variance will not be a substantial detriment to adjacent land and will not materially impair the purposes of these Rules.

Adverse economic conditions shall not be a valid reason to grant a variance.

A request for a variance shall be in writing and shall state specifically the reasons for the request and shall include all data and information in support of the request. The request shall be reviewed and approved, disapproved or approved with modifications within twenty (20) working days. Failure to act within said time will result in the variance request being approved.

A fee of Two Hundred Dollars (\$200.00) shall accompany the application for a variance.

**Attachment 1.4**  
**Erosion and Sediment Control**  
**Workshops**

## Erosion and Sediment Control Workshop

February 27, 2007  
for  
Engineers and Designers  
9am-1pm

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### Agenda:

9:00-9:15am

Introduction, Mahoning County  
Engineers  
John Woolard, CPESC

9:15-10:00am

OEPA Construction Permit  
Kelvin Rogers, Ohio EPA

10:00-11:00am

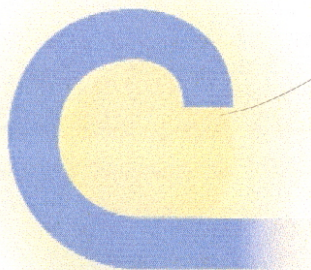
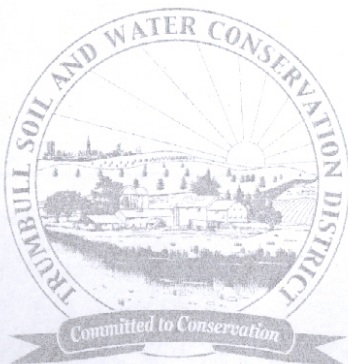
2006 edition, Rainwater and Land  
Development Manual  
John Mathews, ODNR

11:00-12:00noon

Permit Process for streams and  
wetlands  
Christina Schroeder, USACE

12:00noon-1:00pm

Lunch provided  
Pizza, pop



## Erosion and Sediment Control Workshop

March 6, 2007  
for  
Mahoning Valley Developers  
9am-1pm

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### Agenda:

9:00-10:00am

**Local ESC Performance Standards,**  
John Woolard, Mahoning County  
Engineers

10:00-11:00am

**Wetland and Stream Permitting**  
Ed Wilk, Ohio EPA

11:00-11:15am

**Break**

11:15-11:30

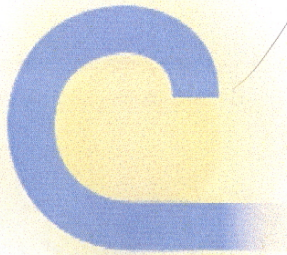
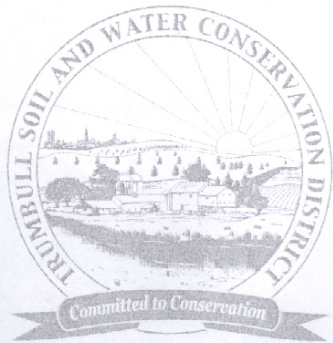
**Individual lot ESC's**  
Trumbull SWCD

11:30-11:45am

**Erosion and Sediment Control  
Inspections**  
Don Garver, Mahoning SWCD

12:00noon-1:00pm

**Lunch provided**  
Pizza, pop



# **Attachment 1.5**

## **SWCD Urban Report**

**❖ Mahoning SWCD Urban Program Phase II Report**  
**❖ April 2006-April 2007**

- Residential and Commercial Development:
  - **31** Storm Water Pollution Prevention Plan (SWPPP) Reviews Completed
  - **269** Site Inspections Completed
  - **NOVs-8**
- Urban Complaints/Inquiries.....**24**
- AUSTINTOWN
  - Runoff/Detention pond failure at Home Depot
  - Wetland Disturbances-2
  - Stormwater control device maintenance issue
- BEAVER
  - residential sediment complaints from zoning department; Storm water management pond maintenance issues-2
- BOARDMAN
  - Wetland issues, stream encroachment/modification, stormwater management facility maintenance issues-6
- CANFIELD
  - Wetland issues @proposed development sites, sediment pollution complaints, wetland disturbance, streambank erosion, riparian setback inquiries-2
- COITSVILLE
  - One wetland disturbance (Army Corp of Engineers, Mahoning BOH, Ohio EPA involvement)
- POLAND
  - 3 wetland disturbances (Army Corp of Engineers, Ohio EPA involvement)
  - Sediment complaints-3
- SPRINGFIELD
- Struthers City-Runoff and fill issues at TC Redi-Mix, polluted runoff flowing to Struthers storm sewer
- Lowellville City-Railroad bed disturbance; hillside erosion issue along Eastwood Street-2

**Attachment 1.6**  
**SWPPP Review Protocol and**  
**Approval Process for ESC Plans**

### **Mahoning County Protocol for SWPPP Review**

A file must be created for each project, including SWCD “6 notes” and all applicable maps, permits, contact information and other relevant information

#### **A) Permit Compliance**

##### **Permits include an EPA NOI, USACE Nationwide or Individual Permit, Local Application, etc.**

1. Has an Application for Coverage under the Mahoning County Erosion and Sediment Control Rules (FORM 1) been completed?
2. Have the appropriate fees been paid? They must be submitted with the Plan. Make a copy of the check and keep it in the file.
3. Has an OEPA Notice of Intent been filed or included?
4. Do soils indicate the possibility of wetlands on the site, i.e. hydric or non-hydric with hydric components? If yes the site must be field verified. If it appears that the site contains wetlands, wetland delineation is required. Any filling, grading, etc., resulting in the disturbance of greater than 1/10<sup>th</sup> of an acre of wetlands is regulated under section 404 or 401 of the Clean Water Act and require a U.S. Army Corps of Engineers and/or Ohio EPA Permit. Permit verification must be submitted with the Plan, prior to approval.
5. Are there any stream crossings, stream relocation, piping of streams at the site? Each of these activities is regulated under section 404 of the Clean Water Act and requires a U.S. Army Corps of Engineers Permit. Permit verification must be submitted with the Plan, prior to approval.

#### **B) Review Process**

##### **The review must be completed within 21 days of receiving the SWPPP**

1. Does the Plan contain all of the requirements in the OEPA and or SWCD checklist?
2. Does the plan include contact information for all entities involved in the construction process?
3. Are the BMP's appropriate and located in the correct locations?
4. Visit and walk the site with the Plan prior to approval.
5. Send a letter to the site owner, developer and/or engineer approving or denying the Plan as received. If approved, send a copy of an inspection log for use by the site owner, developer and/or engineer to inspect the site once every 7 calendar days or within 24 hours of a ½ inch or greater rainfall event.
6. If the Plan is denied, the letter should identify the deficiencies.
7. If the plan is approved, assign the project a Project code (FORM 1) with a two letter township code. For example, the first project of 2007 in Canfield Township would look like: CA-0001-07
8. Courtesy Copy (CC) the approval/denial letter to the County Engineers Office, Building Department and Township Zoning Inspector

#### **C) Preconstruction meeting**

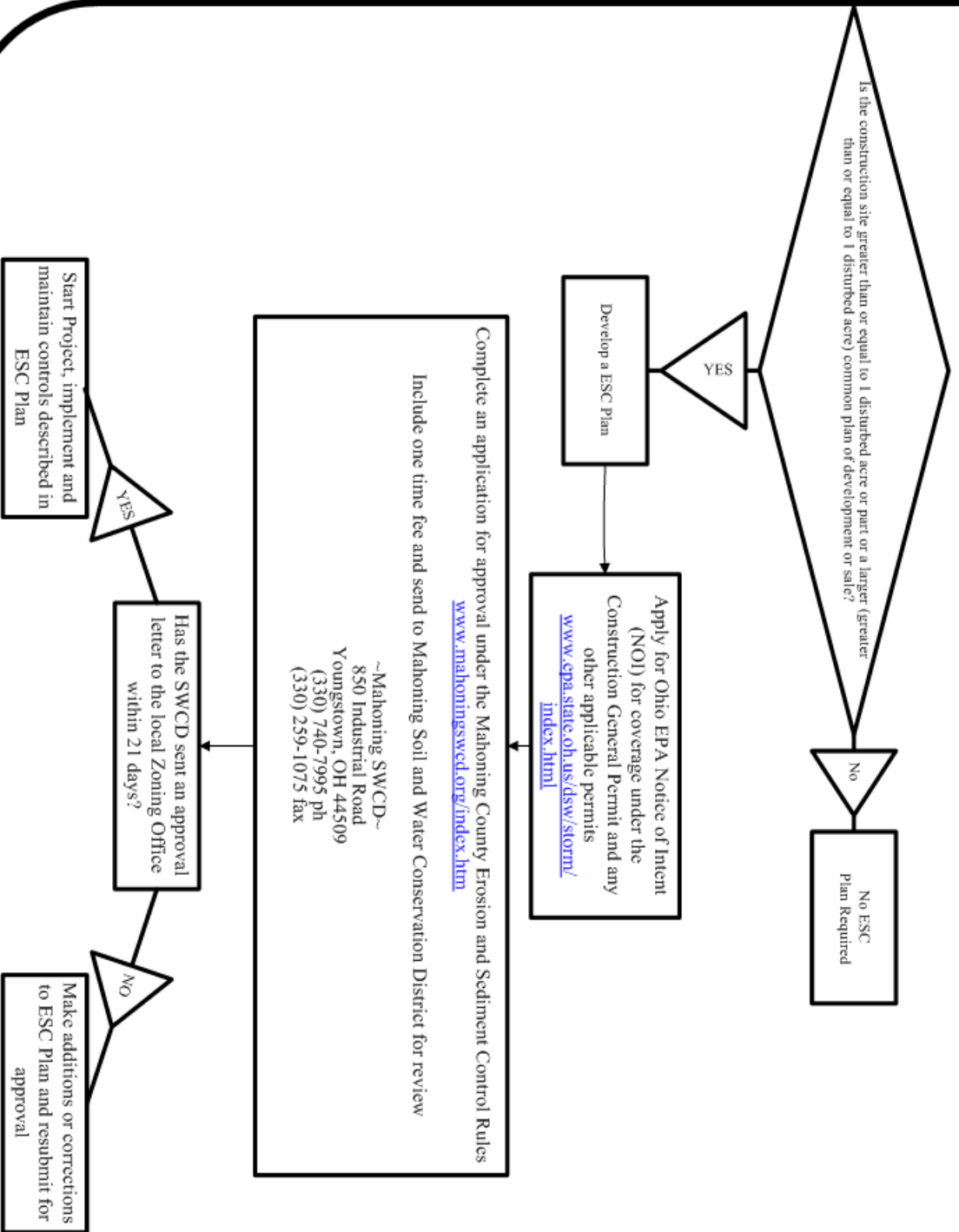
1. Schedule a preconstruction meeting with the contractor, developer and/or engineer either at the site or in the office
2. Discuss the plan, construction sequence and avoidance issues
3. Walk the site if required

#### **D) Site Inspections**

1. Inspect the site bi-monthly
2. Are BMP's installed correctly? Is the construction sequence being followed?
3. Are there any on-site adjustments that need to be made to the SWPPP?
4. Complete an inspection report. Make a record in the SWCD “6 note”. If the site is in non-compliance, inform the owner, contractor or developer, whoever holds the permit, of the deficiency. Courtesy Copy the report to the County Engineers Office, Building Department and Township Zoning Inspector.
5. Re-inspect the site in two weeks or less, depending on the severity of the deficiency.

**\*record all correspondence in the attached “6 not**

# Approval Process for Erosion and Sediment Control (ESC) Plans Through the Mahoning County Erosion and Sediment Control Rules



**Attachment 1.7**  
**District Board of Health Semi-annual**  
**Report**



## **DISTRICT BOARD OF HEALTH**

50 Westchester Drive, Youngstown, Ohio 44515

(330) 270-2855  
Laboratory Services (330) 270-2841  
Tuberculosis Clinic (330) 744-4246  
Nursing FAX (330) 270-2860  
Environmental FAX (330) 270-2859  
[www.mahoning-health.org](http://www.mahoning-health.org)

### **MEMO**

TO: Mathew A. Stefanak, MPH, Health Commissioner  
FROM: Wesley J Vins, R.S., Director of Wastewater Programs  
DATE: January 4, 2007  
RE: Household Sewage Treatment System Programs  
**Semi-annual Report July - December 2006**  
2006 annual totals designated as ( )

1. # of real estate transfers evaluated total  
**170 (399) = Septic System Evaluations**  
**162 (352) = Well Evaluations**
2. % of real estate transfers with functioning HSDS  
**129/170 = 75.9% (280/399 = 70.2%)**
3. % of real estate transfers with safe drinking water systems  
**109/162 = 67.3% (243/352 = 69.0%)**
4. # sewage complaints = **49 (101)**
5. # pumping receipts received = **1013 (1995)**
6. # HSDS enrolled in inspection program = **605**  
(aeration on/off lot since 6/8/97, experimental systems, and holding tanks)  
# of inspections by Board of Health = **167 (440)** plus GPS of all O&M systems for Phase II  
# of inspections by Service Providers = **232 (499)**
7. # and % of discharging HSDS meeting standards. **68** systems sampled  
**46/60 = 77% (95/136 = 70%)** meet the BOD standard of 20 mg/l  
**53/54 = 98% (127/130 = 98%)** meet the suspended solids standard of 40 mg/l  
**46/64 = 72% (103/143 = 72%)** meet the fecal coliform standard of 2000 colonics/100ml



**Attachment 1.8**  
**Pollution Prevention/  
Good Housekeeping Workshop**

## **Road and Street Department Workshop**

### **DATE CHANGE (now 2/20/07)**

Dear Road and Street Department Personnel,

I would like to ask for your attendance at the time and place listed below for a morning workshop. Included in the Phase II Storm Water Program, of which your community is a member, are requirements for documentation and self inspection of your road and street operations. I would like to begin with some informal discussion for this first workshop, talk about some of the do's and don'ts according to Ohio EPA.

We will be discussing the following:

- MS4 Outfall Mapping and monitoring of publicly owned discharges
- Salt Storage, Salt Minimization
- Street Sweeping
- Ditch Maintenance
- Spill Response
- Recycling
- Hazardous Materials Storage

**When: Tuesday, February 20, 2007 at 9:00am-11:00am**

**Where: McMahon Hall, Mill Creek Metroparks Experimental Farm in Canfield**

If you have any questions or need more information, please feel free to contact me at the Mahoning County Engineers Office.

Sincerely,

John Woolard  
Environmental Administrator

